THE GEORGE BROWN COLLEGE

FALL PART-TIME COURSES

COMMENCING SEPTEMBER 1976

FALL PART-TIME COURSES

COMMENCING SEPTEMBER 1976

The George Brown College
of Applied Arts and Technology
P.O. Box 1015, Station B, Toronto, Ontario M5T 2T9

Table of Contents

General Information ____ 1
Academic ____ 5
Architectural Technology ____ 13
Athletics and Recreation ____ 23
Business and Commerce ____ 25
Community Services ____ 47
Electro-Mechanical ____ 53
Fashion Technology ____ 59
Food Technology ____ 65
Graphic Arts ____ 69
Language Training ____ 81
Theatre, Dance and Music ____ 85

General Information

Course Commencement Dates

Unless otherwise stated classes in the courses listed in this calendar commence during the week beginning Monday, October 4th, 1976. The last day for classes in the Fall Term is Friday, December 17th, 1976.

Additional classes in some of the courses listed will commence in January (Winter Term) or April (Spring Term) 1977. Calendars covering these terms will be issued at a later date.

Registration Dates

Final registration dates for the Fall Term are Monday, September 20th, Tuesday, September 21st and Wednesday, September 22nd, 1976. Campus offices will remain open until 9:00 p.m. on each of these days.

Advance Registration

From August 1st, 1976, application may be made in person between 8:30 a.m. and 4:30 p.m., Monday to Friday, or by mailing the attached application form accompanied by the total course fee.

Registration Locations

Candidates are expected to register at the campus conducting the course.

The campus on which a course is conducted is indicated in the course description.

Locations of the campuses are as follows:—

College Campus

507 College Street
Tel: 967-1212, ext. 305 or 306

Kensington Campus

21 Nassau Street
Tel: 967-1212, ext. 606, 608 or 609

Casa Loma Campus
160 Kendal Avenue
Tel: 967-1212, ext. 405

St. James Campus
200 King Street East
Tel: 967-1212, ext. 504 or 510

Fees

The amount of the fee for each course is stated in the course description; each of these amounts includes a $5.00 non-refundable registration fee. In some cases, the cost of laboratory fees and materials may be additional to the stated amount of the fee.

The receipt issued at the time of payment of fees is the official receipt for income tax purposes; please retain it carefully, since a duplicate cannot be issued.

Anyone who has attained the age of 65 on or before the start date of the course will pay fees at the rate of $5.00 (total) for courses up to 60 hours duration. For courses over 60 hours the fee will be $5.00 plus a prorated amount.

Identification

Your receipt is your admit-to-lecture identification and must be shown to the instructor at the beginning of the course and whenever requested.

Refunds

To obtain a refund a student must apply in writing to the admissions office; forms are available at the campus office for this purpose.

Refunds will be made only if requested before the third scheduled session of the course. The $5.00 registration fee is not refundable. In addition a charge of $1.00 per hour of each scheduled session held prior to the date of application for refund will be made, whether or not the student attended classes. If a course is cancelled, full refund will be made.

REQUESTS FOR REFUNDS MUST BE ACCOMPANIED BY THE OFFICIAL RECEIPT.

Transfer Between Courses

Students wishing to transfer between courses must apply in person to the admissions office on the campus for authorization of change in their admit-to-lecture identification and for any fee adjustment which may be required.

Part-Time Studies During The Day

Enrolment in regular day subjects or courses is possible. For further information call 967-1212 or direct inquiries to the day-school admissions office.

Prerequisites

Candidates are advised that many of the courses require considerable related experience. Prerequisites stated are the minimum requirement.

Minimum Enrolments

The college reserves the right to cancel any class for which attendance has dropped below the required minimum and to suspend or combine during the session any classes in which attendance falls below the minimum.

Textbooks and Supplies

Textbooks and supplies for all part-time courses may be purchased at the individual campus bookstores.

Certification

Applicants should inquire at the time of registration concerning certification and accreditation.

Changes in Course Offerings

The description of course offerings contained in this calendar is a statement of intention on the part of the College which will be carried out as closely as circumstances permit. However, the College reserves the right to cancel or to change any of the particulars of course offerings without notice.

ACADEMIC STUDIES

Academic

Academic Upgrading/College Preparatory

These courses are designed for those who wish to upgrade their academic standing for self-development and career improvement and for entry into Apprenticeship, Vocational training and two-year diploma programs offered at Colleges of Applied Arts and Technology.

English Upgrading 8 ENG 906

Monday and Wednesday
7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prequisite: Grade 7 English, or ENG 904.
Course Content: Reading, spelling and sentence structure; basic grammatical terms and simple paragraph writing; a refresher in basic English skills for students who have completed public school.

English Upgrading 9 ENG 907

Monday and Wednesday
7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Grade 8 English or ENG 906.
Course Content: Review of grammar and punctuation as required; descriptive, expository and narrative writing; short reports; introductory business letters; precis writing; vocabulary study; short stories.

English Upgrading 10 ENG 908

Monday and Wednesday
7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Grade 9 English or ENG 907.
Course Content: Review of grammar and punctuation as required; descriptive, expository and narrative writing; short reports; introductory business letters; precis writing; vocabulary study; short stories, and poetry from Canadian Literature.

English Upgrading 11 ENG 909

Monday and Wednesday
7:00-10:00 p.m.
Casa Loma Campus
75 hours
Fee: $80.00

Prerequisite: Grade 10 English or ENG 908.
Course Content: Basic communications designed to improve reading rate and comprehenslon, vocabulary range, principles of discussion and debates; the English Language in terms of origin, factors that cause a language to change and standards of usage; essays emphasizing creativity will also be required. Detailed analysis of the short story, poetry and short plays from twentieth century literature.

English Upgrading 12 ENG 910

Monday and Wednesday
7:00-10:00 p.m.
Casa Loma Campus
75 hours
Fee: $80.00

Prerequisite: Grade 11 English or ENG 909.
Course Content: Techniques used by various writers as guidelines for the students in assessing their own work; listening and oral skills with emphasis on debates, presentations, and simulated meetings; detailed analysis of representative twentieth century writers with emphasis on drama and novels.

Mathematics Upgrading 8 MATH 906

Tuesday and Thursday
7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Grade 7 Mathematics or equivalent.
Course Content: Study of whole numbers, fractions, decimals, percent, and an introduction to the metric system.

Mathematics Upgrading 9 MATH 907

Tuesday and Thursday
7:00-10:00 p.m.
Casa Loma Campus
75 hours
Fee: $80.00

Prerequisite: Grade 8 Mathematics or MATH 906.
Course Content: Review of fractions, decimals and percent, powers, square root, metric system, simple areas, perimeters, volumes, and basic algebra.

Mathematics Upgrading 10 MATH 908

Tuesday and Thursday
7:00-10:00 p.m.
Casa Loma Campus
75 hours
Fee: $80.00

Classes begin week of October 6.
Prerequisite: Grade 9 Mathematics or MATH 907.
Course Content: Study of circles, triangles, theorem of Pythagoras, volumes, weight and capacity; metric conversions; multiplication and division of monomials and binomials; linear equations and graphical solutions; trigonometric ratios, and mensuration.

Mathematics Upgrading 11 MATH 909

Tuesday and Thursday
7:00-10:00 p.m.
Casa Loma Campus
75 hours
Fee: $80.00

Prerequisite: Grade 10 Mathematics or MATH 908.
Course Content: Brief review of grades 9 and 10 algebra; exponents, scientific notation and formulae; logarithms; mensuration; ratio and proportion; real number system and quadratic surds; plane trigonometry.

Mathematics Upgrading 12 MATH 910

Tuesday and Thursday
7:00-10:00 p.m.
Casa Loma Campus
75 hours
Fee: $80.00

Prerequisite: Grade 11 Mathematics or MATH 909.
Course Content: Brief review of grade 11 algebra; open sentences, equations, and inequalities; relations, functions, and their graphs; quadratic equations; sequences and series; numerical trigonometry.

Introductory Science Upgrading 10 SCI 908

Tuesday and Thursday
7:00-10:00 p.m.
Casa Loma Campus
75 hours
Fee: $80.00

Prerequisite: Grade 9 Mathematics or MATH 907.
Course Content: Introduction to science; measurement, sound, light, electricity, heat and mechanics.

Biology BIO 900

Monday and Wednesday
7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00

Prerequisite: Grade 10 Science or SCI 908.
Course Content: Human anatomy and physiology in the grade 11 or 12 level; structure and function of the various body systems with laboratory work.

Chemistry CHEM 900

Tuesday and Thursday
7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00

Prerequisite: Grade 10 Science or SCI 908.
Course Content: Grade 11 or 12 level; introductory college chemistry with laboratory work.

Physics PHY 900

Tuesday and Thursday
7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00

Prerequisite: Grade 10 Science or SCI 908 and grade 11 Math or MATH 909.
Course Content: Grade 11 or 12 level.

Advanced Technical Evening Classes (A.T.E.C.)

Construction Law AS 908

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Understanding of Civil Law as it applies to the construction industry; construction laws and by-laws; contracts, engineering agreements; labour relations and trades disputes; Workmen's Compensation; patents and inventions; trade marks, industrial design and copyrights; company law, boundaries and surveys, easements, factory and shop acts, mortgages, mechanics' liens.

Chemistry (General) CHEM 100

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Methods of chemistry: physical and chemical changes, chemical terminology. Organic chemistry: structure and reactions of common aliphatic groups. States of matter: gas laws, partial pressure. Nuclear chemistry: basic nuclear particles, isotopes, radioactivity, half life, radioisotopes and uses. Equilibrium: rate of reaction, reversibility, LeChatelier's Principle, equilibrium constant, solubility and concentration, ion exchange. Acidimetry and hydrolysis: definitions, pH indicators, titrations, relation to oxidation and reduction. Electro-chemistry, electrolysis, Faraday's Law, electrochemical series, corrosion.

Economics EC 100

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Understanding of the economic factors that influence the personal and business affairs of Canadians; basic economic structure of our society, supply and demand, business organization, money and banking, international trade, business cycles, public finance and taxation, consumer credit and borrowing, personal finances, social services.

English I ENG 100

Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Grade 12 English, ENG 910 or equivalent.
Course Content: Skill in the use of simple, clear, correct English; emphasis on effective oral and written communication, special focus on reading/learning techniques, technical writing, and oral communication of ideas, information and instructions.

English II ENG 200

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: ENG 100 or equivalent.
Course Content: Emphasis on the student's skill in using English with greater facility; effectiveness and precision, through preparing and giving oral presentations, lectures and reports on technical subjects; emphasis on the use of library resources for technical research, preparation of written technical reports, development of analytical techniques, and organization of data.

Mathematics I MATH 100

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Grade 12 Math, MATH 910, or equivalent.
Course Content: Computations with measured quantities; exact and approximate numbers; scientific notation; analysis or error; slide rule and scales; Algebra, Logarithms, Trigonometry and Analytic Trigonometry.

Mathematics II MATH 200

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: MATH 100 or equivalent.
Course Content: Algebraic notations: binomial theorem, Trigonometry. Analytic Geometry: the straight line, loci, conics, second degree equations. Differential Calculus: limits, derivatives of product, quotient and power functions, rate of change, maxima and minima. Integration: indefinite and definite integrals, areas under the curve, volumes of revolution.

Mechanics I MECH 100

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: MATH 100 or equivalent (prior to or concurrent with Mechanics I).
Course Content: Basic principles of statics: coplanar, parallel and concurrent force systems, friction, centroids and centres of gravity, second moments of areas. Dynamics: basic principles, rectilinear motion, work, energy and power, impulse, momentum, impact.

Mechenics of Meterials I MECH 110

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: MATH 200 and MECH 100.
Course Content: Mechanical properties and testing; unit stress and strain; beam type members — statically determinate; beam type member design; deflection due to bending; thin cylinders and joints; resilience; torsion, combined stresses.

Physics I PHYS 100

Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: MATH 100 or equivalent.
Course Content: Properties of matter; mechanics: force, motion, speed, velocity, acceleration, projectiles, momentum, simple machines, work, friction, elasticity. Heat: temperature measurements, heat transfer, expansion, heat units, latent and super heat. Sound waves. Light: intensity, inverse square law, speed of light, ray optics, wave optics including lenses, interference, diffraction and polarization. This course is taught in SI units.

Career Improvement

English (Technical) ENG 530

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Related to trades and technologies at the level needed for journeyman status; reading for comprehension, reading for details, reading for main ideas; summarizing information, making notes, and reading as studying; remedial and developmental work in oral and written expression.

Rapid Reading ENG 900

Tuesday, 7:00-9:30 p.m.
Casa Loma Campus
40 hours
Fee: $45.00

Course Content: Designed to help the student improve his reading speed and level of comprehension; current reading level is determined and an individual program is devised to correct reading problems; emphasis on improving the student's reading speed; modern methods of information processing.

Mathematics MATH 530

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

This course is designed to prepare the student for future studies at the post-secondary level in technical Mathematics; also suitable for electrical apprentices who require credit at the intermediate and advanced levels.
Course Content: Algebraic operations, factoring, linear and quadratic equations, trigonometry, solution of right angle and oblique triangles, logarithms and vectors.

Trade Mathematics I MATH 610

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

This course is designed for tradesmen, apprentices, and persons desiring a foundation in trade Mathematics — basic and intermediate levels for most trades.
Course Content: Whole numbers, fractions, decimals and percentages applied to trade problems; square root calculations and the Pythagorean theorem; calculations involving circles, triangles, compound areas and volumes; manipulation of trade formulae.

Trade Mathematics II MATH 630

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

This course is designed for tradesmen, apprentices and persons desiring advanced study in trade mathematics — intermediate and advanced level for most trades.
Course Content: Manipulation of more complex trade formulae; mensuration; graphs, charts and trade estimating; ratio, proportion and variation; the slide rule.

Applied Computer Programming MATH 922

Saturday, 9:00 a.m. to 12:00 noon
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: A good working knowledge of basic Mathematics.
Course Content: Time-sharing using Basic computer language; systems commands and various statements necessary for developing a program; industrial and business applications; programming theory and introductory Fortran; emphasis on hands-on use of computer terminals.

Medical Terminology Part I ANAT 100

Tuesday, 7:00-9:00 p.m.
Casa Loma Campus
30 hours
Fee: $35.00

Course Content: Terminology related to normal structure and function of the various body systems; some laboratory work.
NOTE: ANAT 100 is a compulsory subject for the Business and Commerce part-time Court Reporters certificate program.

Medical Terminology Part II ANAT 101

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
30 hours
Fee: $35.00

Prerequisite: ANAT 100
Course Content: Terminology related to the abnormal (diseases, disorders); nomenclature and therapeutic action of common drugs.

Two-Person Communication ENG 914

Wednesdays, 6:00-8:00 p.m.
Kensington Campus
24 hours
Fee: $30.00

This course is designed to help the participants become aware of the state of their own communicative skills. It will be of particular value to people who are involved in various forms of two-person communication in their work, such as supervisors, managers or others who are in close contact with the public. The course will use films and case studies to help improve communication skills.

English for New Canadians ENG 904

Tuesday, 7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Course Content: Designed for persons whose native language is not English, but who possess an ability in English equivalent to that acquired from a basic course in English-as-a-Second-Language. Each student will be tested to determine areas of need and an individual program in language skills will be prepared; emphasis on vocabulary building, correct usage of expressions, idioms, sentence building, reading skill, composition, pronunciation, inflection, accent and conversation.

English and the Business World ENG 201

Tuesday and Thursday
7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Class begins week of September 6.
Course Content: This course in business communication covers a great variety of letters, written from both the business firm's and consumer's point of view, including letters of application, claim, credit, inquiry, and sales; mechanics of the language, particularly as they arise in student writing; reports; resumes; and oral communication, consisting of interviews, telephone techniques, prepared talks, discussion and debate.

Psychology Introductory PSY 161

Monday and Wednesday
7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Course Content: Concepts and theories of psychology: learning, motivation, individual differences; application to practical issues in business and personal life, helping the student to understand himself and others.

Business Law AS 907

Tuesday and Thursday
5:30-8:30 p.m.
St. James Campus
60 hours
Fee: $65.00

Class begins week of September 6.
Course Content: Designed to provide an understanding of Common Law as it applies to private citizens and to persons engaged in small business enterprises; definitions and explanations of contracts, employment, agency, the sale of goods, insurance, real estate, partnership, bankruptcy, negotiable instruments, business crime, torts.
Note: AS 907 is a credit subject toward FIIC standing.

Economics EC 903

Monday and Wednesday
5:30-8:30 p.m.
St. James Campus
90 hours
Fee: $95.00

Class begins week of September 6.
Course Content: Basic economics and industrial organizations: forms of economic organization and their strengths and weaknesses. Monetary theory: money, credit and banking, Canadian banking system. Forms of business organization and business financing. Supply and demand business cycles and compensatory countercyclical fiscal policy. Labour economics. Insurance. Civics, organization of federal, provincial and municipal governments.
Note: EC 903 is a credit subject toward FIIC standing.

Metric System SI 900

Monday, 7:00-9:30 p.m.
Casa Loma Campus
10 hours
Fee: $15.00

Historical perspective; Development of the Metric System; Introduction to the SI Metric System; Units and derived units; Notation for SI units; Applications; Conversions; Films.

Advanced Coatings Technology CHEM 906

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
45 hours
Fee: $50.00

Course Content: Plasticizers, solvents, coalescing solvents, pigments (primers and extenders) driers, antioxidants, complexing agents, thickeners, fungicides, preservatives, slickening agents, wetting agents, dispersants, antifoams, surfactants, flame retardants, freeze-thaw stabilizers.

Advanced Coatings Technology CHEM 907

Saturday, 9:00 a.m. - 3:00 p.m.
Casa Loma Campus
60 hours
Fee: $75.00

Prerequisite: CHEM 901 — Basic Coatings Technology or equivalent.
Course Content: Quality control of raw materials, preparation and evaluation of solvent and water born coatings, report writing. This is a laboratory course.
Note: Enrolment for this course is limited.

Basic Coatings Technology CHEM 901

Thursdays, 7:00-10:00 p.m.
Casa Loma Campus
75 hours
Fee: $80.00

Starting date: September 30.
Course Content: (a) Raw Materials: Oils, natural and symthetic resins, solvents, driers and additives, prime (white, colour organic-inorganic) and extender pigments. (b) Formulation of Organic Coatings: Principles of formulation, dispersion, testing methods, lacquers, trade sales (solvent and water based), industrial corrosion and chemical resistant, specialty coatings, powder coatings, ink technology, surface preparation and application techniques. (c) Practical-Coatings Laboratory: Preparation and evaluation of solvent and water based coatings, laboratory reports.

Astrology (Beginners) ASTR 900

Thursday, 6:00-8:00 p.m.
Casa Loma Campus
40 hours
Fee: $45.00 (plus $15.00 examination fee which is to be paid to the Institute for Astrological Studies)

Course Content: Elements of Astrology; origin and history of Astrology; signs, planets, houses and their relationships. Students will be examined at the end of this basic course before they can continue to the Intermediate course. Information on the requirements for Institute membership is available by telephoning 923-5019.

Astrology (Intermediate) ASTR 901

Monday, 7:00-9:00 p.m.
Casa Loma campus
Fee: $45.00 (plus $15.00 examination fee which is to be paid to the Institute for Astrological Studies).

Prerequisite: Successful completion of the examination at the Beginner's level. The Intermediate level comprises two half courses.
Course "A" Content: Chart-making, geography, measuring positions of stars and planets, logarithms, mathematics of Astrology.
Course "B" Content: Aspects and introduction to chart interpretation. Students will be examined at the end of each half course and must successfully complete this level before they can continue to the Advanced level course.

ARCHITECTURAL TECHNOLOGY

ARCHITECTURAL TECHNOLOGY

Architecture

Bricklaying MAS 900

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Experience or interest in the trade.
Course Content: Bonds, preparation of mortars, layout of different types of walls, piers, pilasters; tools and equipment; types of bricks with characteristics and sizes; sand; sand lime, and cement; methods of storage; preparation of mortars in cold weather.

Cabinet-Making CAR 900

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Familiarity with the fundamentals of cabinet-making and wood-working machinery.
Course Content: Conditioning and use of hand tools and machines; joints and methods used in cabinet-making; layout and design.

Carpentry I CAR 901

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
30 hours
Fee: $35.00

Prerequisite: Open.
Course Content: Hand and power tool practice, door repair, lock installation, popular hardware, materials and methods of recreation room construction.

Carpentry II CAR 902

Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Employment in the Carpentry trade.
Course Content: Roof framing — equal pitch, basic stair building and national residential building code. Approximately 20 hours classroom theory, 40 hours practical.

Plumbing Basic PLUM 900

Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Measuring pipe, pipe materials, drainage terms, fundamentals of drainage design, stack terms, footings and terminals, traps and trap seal loss, vents and venting, wastes, sizing, prohibited fittings and connections.

Plumbing Qualification PLUM 902

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: A refresher course in general plumbing theory and code (Provincial) for those required to write the Ontario Certificate of Qualification examination.

Plumbing Design and Installation PLUM 904

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Journeyman's license or Ontario Certificate of Qualification. Preparation for Master Plumber standing.
Course Content: Review of legislation relevant to the construction industry; examination, discussion and interpretation of the Ontario Plumbing Code; Mathematics and Physics are necessary to understand design problems, discounts, overhead and profit applications.

Mechanical Systems I CO 912

Wednesday, 5:30-8:30 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Of particular interest to personnel employed by the local government building departments who are involved in Residential Rehabilitation Assistance and Neighbourhood Improvement programs.

Electrical Content: Ontario Hydroelectric Code, terminology, materials, methods of installation, metering, services, on-site inspections, minimum electrical requirements.
Plumbing Content: Provincial Plumbing regulations, drainage design, building traps, cleanouts and location, floor drains, basement fixtures, prohibited connections, venting, trapping, stacks, terminals, water supply, hot water tanks, cross connections, permissible materials, prohibited fittings and connections.

Sheet Metal Design and Installation SM 903

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Currently employed in the sheet metal industry with a journeyman's standing.
Preparation for Master Sheet Metal Worker standing.
Course Content: Labour legislation in relation to the construction industry — city by-laws, underwriters, definition of terms applied to heating and air conditioning, use of N.W.A. and A.C.A. manuals for heat loss and heat gains, pipe sizing and location of outlets and inlets in residential installation, types of fans, air flow and types of instruments used, calculations in ventilation requirements, heating and pipe sizing by velocity, use of charts and tables.

Sheet Metal Theory SM 907

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: This is a general refresher course in sheet metal theory for those required to write the Ontario Certificate of Qualification. It is also accepted for apprenticeship upgrading.

Stationary Engineering Courses

Casa Loma Campus
90 hours
Fee: $95.00

Course Content: These courses are of 90 hours duration each and will encompass modular material as time permits.

STAT 901 Stationary Engineering — 1st Class — Wednesday
STAT 902 Stationary Engineering — 2nd Class — Monday
STAT 903 — Stationary Engineering — 3rd Class — Tuesday
STAT 904 Stationary Engineering — 4th Class — Thursday

Blueprint Reading for Machine Trades ENDR 910

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

The aim of this course is to provide tradesmen with a basic understanding of blueprint reading.
Course Content: A study of orthographic and pictorial drawing systems. Freehand sketches of machine parts using multiview, isometric and oblique projections. Blueprint reading: The interpretation of industrial blueprints including notes, specifications, dimension, tolerances, and surface finish. The use of auxiliary views, sectional views and developments. Common machine details including threads and fasteners, gears, cams, keys, and taper pins as specified on detail working drawings. Sub-assembly and final assembly drawings.

Blueprint Reading for the Welding Trade ENDR 572

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

The aim of this course is to provide welders with a basic understanding of blueprint reading.
Course Content: A study of orthographic and pictorial drawing systems. Freehand sketching: Sketches of welded parts using multiview projection and basic dimensioning principles. Blueprint reading; a study of welded detail and assembly blueprints, including auxiliary views, scale drawings, shop notes, dimensions, tolerances, small tool operations, sectional views and conventional practices. The interpretation of welding symbols as specified by the Canadian Welding Society. Conventional practices as used on welding and fabrication blueprints including structural shapes and their symbols, plate specifications, bills of material and general shop notes and specifications.

Blueprint Reading for Millwrights — Part I ENDR 912

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

The purpose of this course is to provide tradesmen with a basic understanding of blueprint reading.
Course Content: Basic drafting principles; instruments, line work, pencil drawing techniques. The three-view drawing system. Principal views and single auxiliary views. Main types of commonly used sectional views. Free-hand engineering sketching of parts. Basic dimensioning principles and the theory of manufacturing tolerances. Surface finishes; symbols used, surface gauge plates, applications, basic forms, how to show on drawings. The Study of blueprints typical of the trade.

Blueprint Reading for Millwrights — Part 2 ENDR 913

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Part 1 — ENDR 912 or equivalent.
This course is intended for tradesmen who wish to obtain a greater knowledge of trade blueprint reading.
Course Content: Advanced studies of blueprints; auxiliary views, sectional views, dimensioning systems, classes of machine fits and tolerances; manufacturing processes including casting, forging, moulds, machining, and material specifications; fastening devices, both permanent and removable and their specifications; welding symbols commonly used as per Canadian Welding Society Standards; structural steel symbols, dimensioning techniques and standard shapes; structural layouts using symbols and bill of material, piping drawings, symbols, piping code, line diagrams in single line and isometric, standard hardware used in piping installations, theory of drives, spur and bevel gearing, couplings, "V" belts, hydraulics, use of industrial catalogues, the study of shop and field installation drawings.

Blueprint Reading for Ironworkers — Part 1 ENDR 950

Monday, 7:00-10:00 p.m.
Casa Loma Campus
30 hours
Fee: $35.00

A basic course in Blueprint Reading including; the projection system, principal views, dimensioning, tolerances, scales, sectional views, sketching, and a study of basic structural blueprints.

Technical Drawing I — A.T.E.C. Program (Approved) ENDR 901

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

An introduction to drawing office practice, including instruction in the use of instruments, lettering, linework, applied geometry, third angle orthographic projection, oblique and isometric drawings, freehand sketching, conventions and symbols, sections, tolerances, limits and fits, surface roughness, gears, cams, pipe fittings and layouts, electrical drawings and symbols and detail, layout and assembly drawings.

Technical Drawing II — A.T.E.C. Program (Approved) ENDR 902

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: ENDR 901 or equivalent.
This course is a continuation of Technical Drawing I. The topics included are treated in greater depth.
Course Content: Bearing Types, lubrication, selection. Gear types, definitions, formulae, gear trains, application and drawings. Cam types, followers, motion, layouts, displacement diagrams, drawings. Selection of fasteners, fittings, springs and other standard components. Limits and fits, unilateral and bilateral tolerances, classes of fits, geometric tolerances, standard notes and symbols. Surface roughness, engineering materials and production methods. Jigs, fixtures and gauges, practical drawing applications. Details, design layouts, assemblies and subassemblies.

Process Piping Drafting— Part I ENDR 903
A.T.E.C. Program (Approved)

Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Basic knowledge of mechanical drafting, ENDR 901 or equivalent.
The purpose of the course is to introduce to the draftsman the specialized techniques of process piping drawing.
Course Content: Introduction to orthographic and pictorial piping drawing using single and double line representation, including piping symbols, fittings, valves, piping standards and classifications, schematics and flow diagrams. Materials, fabrication and simplified piping layout.

Process Piping Drafting — Part II ENDR 929

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Successful completion of Process Piping Drafting Part I — ENDR 901.
This course will enable the student to apply the basic principles he has learned in Process Piping Drafting — Part I to a Piping Project, and study in more detail the design features involved on a typical project.
Course Content: The student will complete a typical Piping Project, making layouts, system detail drawings, hanger locations and the necessary schedules and bills of materials.

Process Piping Design Upgrading Courses For Designers

This is a series of six short courses suitable for Process Pipe designers who may be involved in special technical areas. The courses are designed to help senior piping draftsmen and designers upgrade their knowledge in these specific areas. The courses may be taken singly or in various combinations over a period of time. The courses available in this series are:

ENDR 931 Piping Standards and Codes — Part I
ENDR 937 Piping Standards and Codes — Part II
ENDR 932 Pipe Design and Calculation
ENDR 933 Pipe Stress Analysis and Flexibility
ENDR 934 Pipe Hangers, Supports and Guides
ENDR 935 Process and Energy Systems
ENDR 936 Foundations, Structures and Platforms

The following courses from this series will be available during the period September to December 1976.

Piping Standards and Codes — Part 1 ENDR 931

Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
30 hours
Fee: $35.00

Course Content: A study of various Piping Codes, Standards, and material specifications. The interpretation of standards and codes, and their application to process piping engineering practice.

Pipe Design and Calculation ENDR 932

Monday, 7:00-10:00 p.m.
Casa Loma Campus
30 hours
Fee: $35.00

Course Content: The calculation of friction losses and pressure drop in various types of pipe. The determination of pipe sizing and the use of charts and tables. Pumping characteristics.

Pipe Stress Analysis and Flexibility ENDR 933

Monday, 7:00-10:00 p.m.
Casa Loma Campus
30 hours
Fee: $35.00

Course Content: Design allowances for stress caused by the expansion of fluids. A study of flexibility and stress analysis in piping systems.

Pipe Hangers, Supports and Guides ENDR 934

Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
30 hours
Fee: $35.00

Course Content: Types of commonly used hangers and their applications. Calculation of hanger weights. The design and use of conventional anchors, guides, and sway braces.

Tool Design Part-Time Courses

A part-time student may study individual courses or he may complete a prescribed program of courses as credits toward a diploma as a tool design technician. Details of the program are shown in the 1976/77 day calendar and in the tool design technician brochure. Some credits may be granted to mature students on the basis of previous education or experience. Inquiries should be made at the admissions office.
Prerequisite: Grade 12, preferably with machine shop or drafting option or equivalent industrial experience. Students without previous drafting experience should register for Technical Drawing I, ENDR 901.

Jig and Fixture Design 1 — A.T.E.C. Program (Approved) ENDR 130

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: ENDR 901 or equivalent.
Course Content: Freehand sketching and machine drafting of basic jig and fixture designs, emphasizing current production methods and organization.

Jig and Fixture Design 2— A.T.E.C. (Approved) ENDR 131

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00

Prerequisite: ENDR 130 or equivalent.
Course Content: Freehand sketching and machine drafting of advanced jig and fixture designs, emphasizing current production methods and organization.

Die Design 1 — A.T.E.C. Program (Approved) ENDR 140

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00

Prerequisite: ENDR 901 or equivalent.
Course Content: Freehand sketching and machine drafting of basic blanking, piercing, cut-off and blending dies.

Die Design 2 — A.T.E.C. Program (Approved) ENDR 240

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00

Prerequisite: ENDR 140 or equivalent.
Course Content: Freehand sketching and machine drafting of advanced blanking, piercing and bending dies. Introduction to basic draw dies.

Architectural Drafting — Part I DR 900

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Drafting equipment and procedure, Canadian symbols and conventions, foundation and floor plans for various types of construction, site plans, typical wall section, window details, door details, stair details, fireplace and chimney details, simple structural steel and reinforced concrete details, freehand sketches.

Architectural Drafting — Part II DR 901

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Successful completion of Part I, employment in architectural drafting at the junior level, or graduation at the grade 12 level in architectural drafting.
Course Content: Planning drawing layout; presentation drawing in the form of rendered plan and elevation; drawing plans, elevations, full sections, details and structural drawings of commercial or industrial buildings.

Blueprint Reading For The Construction Trades DR 931

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
50 hours
Fee: $65.00

Credit toward AR DR 10/20.
Intended for those working in all branches of the building trades and serves as a foundation for further study.
Course Content: Orthographic projection, dimensions, pictorial drawing, drawing to scale, symbols and conventions, standard construction, plan study, construction details, plan reading and interpretation.

Reinforced Concrete Design STR 900

Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: The theory of mechanics of reinforced concrete design such as modules of elasticity, moments of reaction, shear and bending; design of reinforced concrete components including footings, beams, solid, ribbed and stair slabs, web reinforcement, bar schedules and bar placement; working stress and ultimate strength design methods.

Structural Steel Design STR 901

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Force systems, force analysis of structures, stress, strain, shear and moment in beams; design of columns, beams, bolted and welded connections.

Quantity Surveying — Part I and Building CO 101

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Designed for small builders and those wishing to commence studies for Canadian Institute of Quantity Surveyors examinations.
Course Content: Mathematics related to take off, general methods and procedures for taking off quantities for excavation; site work, concrete, formwork, reinforcement, brick and block masonry, and rough carpentry.

Construction Methods and Materials CO 901

Thursday, 3:00-6:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Of particular interest to personnel employed by the local government departments who are involved in Residential Rehabilitation Assistance and Neighbourhood Improvement programs.
Course Content: Brick material, masonry, bricks, tiles, etc., doors and windows, light wood framing, foundations, excavation water-proofing, etc.

Blueprint Reading and Estimating CO 910

Tuesday, 8:30-1:00 p.m.
Casa Loma Campus
49.5 hours
Fee: $55.00

Of particular interest to personnel employed by the local government building departments who are involved in Residential Rehabilitation assistance and Neighbourhood Improvement programs.
Course Content: Reading architectural, structural, mechanical and electrical drawings for residential construction with particular reference to symbols, conventions and dimensioning required for quantity take off and preparation of estimates; method of measurement of work required in reconstruction, alteration and rehabilitation of residential properties; analysis of prices of various trades including excavation, masonry, carpentry, finishings, roofing, plumbing.

Air Conditioning Residential and Small Commercial AIR 905

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00

Prerequisite: Employment in the heating or air conditioning industry as journeymen or equivalent.
Selection, installation and service of mechanical air cooled air conditioning equipment to five tons capacity.
Course Content: Refrigeration definitions, cycle compressors, condensers, evaporators, tubing and connections, safety, instruments, electric motors, electrical applied to refrigeration motors, electrical circuits, certified equipment, predicting and controlling sound levels, winter operaton, selection of equipment, estimating, installation start-up, air problems and measurement, and service analysis.

Gas Appliances AP 900

Monday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Grade 10 or equivalent.
Course Content: Gas ranges, classification and types, gas range adjustment and servicing, tip burner adjustments, simmer adjustments, low temperature oven burner adjustments; oven heat control, broiler adjustments, burner valves, range pilots, by-pass flame adjustments, dryers operation, dryer controls, thermostat, timer, door switch, solenoid valve, warpe safety switch, dryer installation, gas connection, testing and fault finding, miscellaneous appliances, gas refrigerators, gas-fired incinerators, gas lamps, LP conversion.

Propane Gas AP 902

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Grade 10 or equivalent.
Designed to prepare students to write the examination for the Propane Gas Fitter Licence.
Course Content: Properties of propane Gas, basic requirements for field approved appliances, propane piping and tubing requirements, review of ventilation and combustion air, general requirements for appliances storage and handling, cylinder filling, location and storage, propane tanks, accessories and equipment, transports, tank trucks and the transportation of propane, propane as an engine fuel, vaporizers, indirect and direct fired cylinder systems for highway mobile vehicles, review of basic domestic gas burner controls and heating system, review of the domestic hot water heater.

Appliance Servicing — Part I AP 903
(Electrical Fundamentals and Small Appliences)

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Lome Campus
60 hours
Fee: $65.00

Prerequisite: Grade 10 or satisfactory equivalent.
Course Content: Nature of electricity, basic electrical quantities, Ohm's Law and its application, electrical circuits, magnetism and electromagnetism, electrical circuitry and fault finding, motors, power and heating effects, electrical measuring instruments, various switching devices, theory and repair of small appliances, ranges.

Appliance Servicing — Part II AP 904
(Domestic Refrigeration)

Monday and Wednesday,
7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Grade 10 or equivalent.
Course Content: Fundamentals, compression system of refrigeration, refrigerants, liquid feed devices, evaporators, compressors, condensers, electric motor controls, defrosting methods, food preservaton, evaluating and charging, conditioners, circuit tracing, fault finding, service and analysis.

Appliance Servicing — Part III AP 905
(Laundry Equipment)

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Satisfactory completion of AP 903 or equivalent.
Course Content: Theory and operation of wringer and automatic washers, dryer, and dishwashers, fault finding and repair procedures, circuit tracing, service analysis.

Air Conditioning Design I AIR 900

Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: A reasonable knowledge of Mathematics and English at the grade 10 level.

Covers the basic theory and application of air conditioning system. It is offered for persons who have an interest in the heating and cooling of buildings and wish to acquire a working knowledge of the modern methods used for the design of air conditioning systems for residential buildings.
Course Content: Body comfort, air cycles; refrigeration cycle; heat sources and characteristics, psychrometric terms, chart and basic psychrometric processes; cooling and heating load calculations for residences by H.R.A. Manual — J; air distribution. Duct design by H.R.A. Manuals, selection and application of self-contained package air conditioning equipment; air conditioning controls; balancing air conditioning systems.

Air Conditioning Design II AIR 901

Tuesday and Thursday, 7:00-10:00 p.m.
Case Lome Campus
60 hours
Fee: $65.00

Prerequisite: Grade 12 or equivalent industrial experience.
Designed for those who wish to have a working knowledge of commercial and industrial air conditioning systems designs.
Course Content: Influence of temperature, humidity and air motion on comfort; review of basic principles; components of an air conditioning system; behaviour of air vapour mixtures; psychrometric chart; sensible and latent heat; dehumidifying processes as related to designing of air conditioning systems; heating and cooling load calculations from internal and external sources; room air distribution and air duct design, using equal friction, velocity reduction and static regain methods; cooling coil performance and selection.

Pneumetic Controls AIR 907

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
30 hours
Fee: $35.00

Prerequisite: Employment in the Heating and Air Conditioning industry as a journeyman or equivalent.

Course Content: Introduction to pneumatic control circuits, typical applications to radiation, central fan heating, fan coil units, induction units, and year round air conditioning systems.

Air Conditioning Design III AIR 904

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: AIR 901 or employment in the air conditioning industry, with a strong background in load calculations and psychrometrics.
Course Content: Principles of mechanical refrigeration involving behaviour of refrigerants; tables, pressure enthalpy diagrams, refrigeration effect, functions and selection of air handling equipment; control principles and methods for all air systems; need for zoning; reciprocating refrigeration equipment; centrifugal refrigeration equipment; absorption refrigeration equipment; heat pump package; heat ejection equipment; large package equipment; water chilling equipment; water systems and piping; refrigerant piping and systems; a project design and selection problem.

Warm Air Heating and Air Conditioning HT 900

Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00

Prerequisite: Grade 10 or equivalent.
For persons who have a general knowledge of house construction and who wish to acquire a working knowledge of the basic and more advanced techniques involved in the design and application of warm air heating and air conditioning systems and equipment.
Course Content: Heat loss and heat gain calculations by H.R.A. methods; components, equipment and controls for heating and cooling, system specifications, zoning and duct sizing by H.R.A. manuals — "A" and no. 9, use of the Equal Friction Charts; uses of the Psychrometric Chart; humidification and dehumidification, air cleaning, system balancing.

Gas Fitter I HT 902

Tuesday and Thursdey, 7:00-10:00 p.m.
Casa Lome Campus
60 hours
Fee: $65.00

Prerequisite: Applicants should have a full Gas Fitter II Licence and be employed in the industry. They will write an examination for the Gas Fitter I Licence.
Course Content: Fundamentals of combustion control, flame detection devices, firing systems, firing sequences and programs, logic diagrams, combustion controls, non-programming and programming, gas fired conversion burners and boilers, boiler classification and terminology, input calculations burner installations, fuel gas analysis and boiler efficiency, types of conversion burners and package boilers, required CGA valve train assemblies, schematic wiring diagrams, commercial hot water heaters, hot water heating units, systems, miscellaneous equipment, multiple hot water heating units, infra-red burners, make-up heaters and gas-fired air conditioning.

Heating Technical Sales HT 903

Wednesday, 9:00-12:00 noon
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Relevant employment.
This course is designed to upgrade technical representatives and salesmen in the heating industry.
Course Content: Heat loss calculation and duct design, codes and regulations as required for estimating costs and proper sizing of equipment and accessories.

Oil Burner III HT 905

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
30 hours
Fee: $35.00

Prerequisite: Grade 10 or working with associated trades.
Approximately 40% theory and 60% shop; designed to prepare students to write examinations for Oil Burner Servicing Licence Class III.
Course Content: Types of domestic burners, parts of burners, filters, purposes of controls, settings for basic controls, fuel line problems, safety precautions, public relations, procedure for annual conditioning.

Oil Burner II HT 906

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: HT 905 or satisfactory experience.
Approximately 60% theory and 40% shop; designed to prepare students to write the examination for Oil Burner Servicing Licence Class II.
Course Content: Theory of combustion, types of burners, fuel units, transformers, combustion chambers, nozzles, tank installations, controls, heating systems, wiring diagrams, service procedures, regulations, public relations.

Gas Fitter II HT 907

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00

This course is designed for persons presently engaged in the heating or appliance field, who wish to obtain the necessary knowledge to write the Energy Branch, Gas Fitter II examination for the Gas Fitter II Licence.
Course Content: Properties of natural gas, fundamentals of combustion, gas piping, venting, appliance requirements, fundamentals of gas controls, conversion burners, commercial and industrial utilization, service problems, shop work.

Commercial and Industrial Heating Equipment HT 908

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Gas Fitter I and Oil Burner II Licences.
This course is designed to develop a serviceman who is capable of servicing and installing commercial and industrial heating equipment.
Course Content: Types of burners, flue gas analysis, heating systems, boiler classifications, combustion control, flame safeguards, non-programming controls, programming controls, schematic wiring diagrams, servicing and trouble shooting.

Refrigeration — Part I REF 900

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Employment in the refrigeration industry or some allied trade.
Course Content: Refrigeration fundamentals and principles, compression system of refrigeration, properties of refrigerants, metering devices, expansion valves, evaporators, condensers, compressors, flow equipment, electric controls and control valves, lubrication, servicing (charging and evacuation), trouble shooting problems, shop demonstrations of silver brazing.

Refrigeration — Part II REF 901

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Successful completion of REF 900 or equivalent experience.
Course Content: Review of fundamentals, defrosting methods, compressor drives, instruments and meters, piping and refrigerant lines, pressure drops, heat calculations, refrigerated enclosures, survey of refrigeration applications, humidity in refrigeration, cooling load calculations, secondary refrigerants, liquid cooling, absorption systems, codes and by-laws, safety precautions.

Refrigeration — Part III REF 902

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00

Prerequisite: REF 901.
To prepare the student to write the Certificate of Qualification examination.
Course Content: Roof top condensers; piping systems, brines, pumps, chillers, centrifugal compressors, heat pumps, symbols, starters and contactors, packaged units, humidifiers, dehumidifiers, spray apparatus, ponds, air cleaning equipment, electronic and curtain, odour control, load calculation commercial and air conditioning, selection of equipment; pneumatic systems, control circuitry, trouble shooting, safety.

ATHLETICS & RECREATION

Athletics/Recreation

Applied Underwater Science AUS 800

Wednesdays or Thursdays
7:00-10:30 p.m.
Casa Loma Campus
52½ hours
Fee: $58.00

Locations: Wed. 186 Beverly Street (Central)
Thurs. Eastern Commerce High (East End)
Starting dates: September 15 and 16.

Course Content: This course is open to anyone with the ability to swim. Covers all aspects of snorkeling and scuba and leads to certification. Open water dives and trips south. All equipment is supplied.

General Fitness FIT 800

Monday and Thursday
7:00-8:30 p.m.
Casa Loma Campus
18 hours
Fee: $23.00

Course Content: This course is designed to improve your fitness level in all areas. Two fitness tests are to be administered. The first test is essential in evaluating the individual's initial fitness or physical level. The exercise program is then designed specifically on the areas that need developing. Group size may range from 6-12 people and is led by an instructor. After the six-week program, there is the retest, which is important in determining the improvement made.
Note: Week of September 20th will be testing week. Please call the Athletic department, Tel. No. 967-1212, Ext. 431 for an appointment.

Ski Conditioning SKI 800

Monday and Thursday
7:30-9:30 p.m.
Casa Loma Campus
18 hours
Fee: $23.00

Starting date November 1.
Course Content: A conditioning program for downhill and cross country skiers. A physical fitness test is given and fitness program designed.
Note: Week of November 1st will be testing week. Please call the Athletic Department, Tel. No. 967-1212, Ext. 431 for an appointment.

Yoga YOGA 800

Tuesday, 7:00-9:00 p.m.
Casa Loma Campus
24 hours
Fee: $29.00

The scientific technique of Traditional Yoga presented in this course will cover physical culture Asana; Pranayama — breathing; meditation — Mind-training. This ancient technique concentrates on individual-self-development for perfect physical and mental well-being. It is strictly individual and teaches methods for independent use.

Yoga Teacher Training Program YOGA 801

Monday, Tuesday, Thursday
Friday, 1:00-2:30 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

This comprehensive course is designed for people interested in learning more about Yoga; the history, the therapeutic value of Hatha Yoga; the science of mind control and the philosophy. It outlines the fundamental principles of Yoga tradition essential to good teaching methods.

Tennis (Beginners) TENN 800

Friday, 5:00-7:00 p.m.
Casa Loma Campus
16 hours
Fee: $21.00

Course Content: Learn the art of playing tennis. A beginning game of tennis requires skill on four basic strokes — forehand, backhand, volley, serve — plus footwork.

Tennis (Advanced) TENN 801

Friday, 7:00-9:00 p.m.
Casa Loma Campus
16 hours
Fee: $21.00

Course Content: Advance your knowledge and skills in tennis, with special attention given to forearm, backhand and serving plus tennis strategy.

Indoor Gardening I GARD 800

Tuesday, 7:00-9:00 p.m.
Casa Loma Campus
20 hours
Fee: $25.00

How to purchase and care for house plants. Plant identification and care, soils, fertilizers, propagation, insects and plant diseases, terrariums, growing plants under lights.

Indoor Gardening II GARD 801

Thursday, 7:00-9:00 p.m.
Casa Loma Campus
20 hours
Fee: $25.00

Prerequisite: Successful completion of Indoor Gardening I (Gard 800).
Course Content: Indoor Gardening II will cover essential elements of botany which apply to successful plant growth. This down to earth course in lay man's language will enable the amateur indoor gardener to understand the effect of the environment on plants grown indoors and in greenhouses. Primarily a theory course, the knowledge gained will enhance and supplement the information given in Indoor Gardening I.
Areas to be covered in this course include plant cells, roots, leaves, stems, transpiration, conduction, absorption, photosynthesis, respiration, flowering and seeding, and factors influencing growth.

BUSINESS & COMMERCE

BUSINESS & COMMERCE

Business and Commerce

Business and Commerce

The Business and Commerce Division is offering a number of Part Time Certificate Programs.

These Programs comprise a number of compulsory subjects as well as one or more electives. The following pages feature outlines of the various programs. Course descriptions can be found under the subject area. i.e. ACC under ACCOUNTING or E.D.P. under ELECTRONIC DATA PROCESSING.

NOTE: Register for Part Time Programs or Courses at St. James Campus only.

Certificate Programs are available in:

1. **Accounting**
2. **Business Management**
3. **Court Reporting**
4. **Legal Office Procedures**
5. **Records Management**
6. **Secretarial Practice**

Part Time Certificate Program In Accounting

This program is designed for persons who wish to acquire a thorough knowledge of the main aspects and facets of accounting. It will be of particular interest to those who are already working in junior positions in that field. However, the program is also valuable to all persons interested in a general career in business administration.

Entrance requirement for this program is either a Secondary School Graduation Diploma, or equivalent standing. Applicants with a lower level of formal education will be considered if they have had related business experience.

Students are expected to complete the program within a maximum of 3 years.

Credits for program subjects taken at other community colleges or similar institutions can be applied for.

6 Courses: 4 compulsory, 2 elective

Compulsory for Accounting

ACC 100	Introduction to Accounting
ACC 102	Accounting II
ACC 202	Cost Accounting I
†MATH 214	Statistics I

Electives for Accounting

BUS 900-A	Business Management I
BUS 900-B	Business Management II
†*ENG 201	English and The Business World
†AS 907	Business Law
ACC 200	General Accounting I (Intermediate)
ACC 205	Auditing and Taxation
EDP 900	Introduction to E.D.P.

Any other E.D.P. Course.

* *"English and the Business World" is a compulsory subject for all students whose native language is not English.*

† *Course details appear in Academic Division.*

Accounting
6 Subjects, 4 compulsory, 2 elective

Compulsory Subjects	Sept. 1976	Jan. 1977	Mar. 1977	Sept. 1977	Jan. 1978
ACC 100	•	•		•	•
ACC 102	•	•		•	•
ACC 202	•		•	•	
MATH 214	•		•	•	
Elective Subjects					
BUS 900-A	•	•		•	•
BUS 900-B	•	•		•	•
ENG 201	•	•		•	•
AS 907	•		•	•	
ACC 200	•		•	•	
ACC 205	•				
EDP 900	•		•	•	

Part Time Certificate Program in Business Management

The prime purpose of this program is to develop potential managers and persons presently employed in junior managerial positions of Canadian businesses.

Entrance requirements for this program is either a Secondary School Graduation Diploma, or equivalent standing. Applicants with a lower level of formal education will be considered if they have had related business experience.

Students are expected to complete the program within a maximum of 3 years.

Credits for program subjects taken at other community colleges or similar institutions can be applied for.

6 Courses: 4 compulsory, 2 electives

Compulsory for Business Management

BUS 900-A	Business Management I
BUS 900-B	Business Management II
MARK 100	Marketing
ACC 100	Accounting I

Elective for Business Management

EDP 900	Introduction to Data Processing
ACC 202	Accounting II
ACC 202	Cost Accounting I
†*ENG 201	English and The Business World
†MATH 214	Statistics I
AS 907	Business Law
†LAW 202	Procedural Law
PHD 100	Introduction to Physical Distribution Systems
BUS 101	Human Relations
BUS 211	Human Resources Management

* *"English and the Business World" is a compulsory subject for all students whose native language is not English.*

† *Course details appear in Academic Division.*

Business Management
6 Subjects, 4 compulsory, 2 elective

Compulsory Subjects	Sept. 1976	Jan. 1977	Mar. 1977	Sept. 1977	Jan. 1978
BUS 900-A	•	•		•	•
BUS 900-B	•		•	•	
MARK 100	•	•		•	•
ACC 100	•	•		•	•
Elective Subjects					
EDP 900	•	•		•	•
ACC 102	•	•		•	•
ACC 202	•		•	•	
ENG 201	•	•	•	•	•
MATH 214	•	•	•	•	•
AS 907	•		•	•	
LAW 202	•		•	•	
PHD 100	•	•	•	•	•
BUS 101	•		•	•	
BUS 211	•	•		•	•

Part Time Certificate in Court Reporting

This program will prepare students for employment in the court reporting field and will enable them to write the CHARTERED SHORTHAND REPORTERS' ASSOCIATION examinations.

Entrance requirement for this program is either a Secondary School Graduation Diploma, or equivalent standing. Applicants with a lower level of formal education will be considered if they have had related business experience.

Students are expected to complete the program within a maximum of 3 years.

Credits for program subjects taken at other community colleges or similar institutions can be applied for.

8 Subjects: all compulsory

TYP 905	Advanced Typing (Speed objective 60 w.p.m.)
SHM 900	Machine Shorthand (Theory)
*SHM 901	Machine Shorthand (Speed)
SH 901	Shorthand Advanced Speed Level (Entrance Requirement of 120 w.p.m.)
BUS 308	Court Procedures
†ENG 301	English and The Legal World (to include Terminology)
†ANAT 100	Medical Terminology I
†ANAT 101	Medical Terminology II

** Can be waived if student attained 100 w.p.m. in SHM 900.*

† Course details appear in Academic Division.

Note:
SH 901 and BUS 308 are available as a combined subject during the Fall Term on Tuesdays and Thursdays from 6:00 to 9:00 p.m.

Court Reporting
all subjects are compulsory

Compulsory Subjects	Sept. 1976	Jan. 1977	Mar. 1977	Sept. 1977	Jan. 1978
TYP 905	•	•	•	•	•
SHM 900	•			•	
SHM 901	•	•	•	•	•
SH 901	•			•	
BUS 308	•	•		•	•
ENG 301	•		•	•	
ANAT 100	•	•	•	•	•
ANAT 101	•	•	•	•	•

Part Time Certificate program in Legal Office Procedures

This program will provide successful graduates with the necessary skills and knowledge for entry into stenographic/secretarial positions usually found in legal offices.

Entrance requirement for this program is either a Secondary School Graduation Diploma, or equivalent standing. Applicants with a lower level of formal education will be considered if they have had related business experience.

Students are expected to complete the program within a maximum of 3 years.

Credits for program subjects taken at other community colleges or similar institutions can be applied for.

6 Courses: 5 compulsory, 1 elective

Compulsory Courses

TYP 905	Advanced Typing
SHP 900	Pitman Shorthand I
	OR
SHF 900	Forkner Shorthand I
*SHP 901	Pitman Shorthand II
	OR
*SHF 901	Forkner Shorthand II
OP 203	Legal Office Practice
†ENG 201	English and The Business World

Elective Course — One of the Following

†AS 907	Business Law
†LAW 202	Procedural Law
†ENG 301	English and The Legal World
BM 905	Dictaphone
BOK 552	Bookkeeping

** English and the Business World" is a compulsory subject for all students whose native language is not English.*

*** Can be waived if student attained 100 w.p.m. in SHP 100 or SHF 100.*

†Course details appear in Academic Division.

Legal Office Procedures
6 Subjects, 5 compulsory, 1 elective

Compulsory Subjects	Sept. 1976	Jan. 1977	Mar. 1977	Sept. 1977	Jan. 1978
TYP 905	•	•	•	•	•
SHP 900	•			•	
or					
SHF 900	•			•	
SHP 901	•	•	•	•	•
or					
SHF 901	•	•	•	•	•
ENG 201	•	•	•	•	•
OP 203	•			•	
Elective Subjects					
AS 907	•		•	•	
LAW 202	•		•	•	
DIC 505	•		•	•	
BOK 552	•	•	•	•	•
ENG 301		•			•

Part Time Certificate in Secretarial Practice

This program will appeal to applicants who wish to embark on a career in the stenographic/ secretarial field as well as those who wish to refresh old skills in order to return to office positions.

Entrance requirements for this program is either a Secondary School Graduation Diploma, or equivalent standing. Applicants with a lower level of formal education will be considered if they have had related business experience.

Students are expected to complete the program within a maximum of 3 years.

Credits for program subjects taken at other community colleges or similar institutions can be applied for.

6 Courses: 5 compulsory, 1 elective

Compulsory Courses

TYP 905	Advanced Typing
**SHP 900	Pitman Shorthand I
	OR

**SHF 900	Forkner Shorthand I
SHP 901	Pitman Shorthand II
	OR
SHF 901	Forkner Shorthand II
OP 101A-B	Typing and Office Practice Parts I & II
*†ENG 201	English and the Business World

Elective Course — One of the Following

†AS 907	Business Law
BM 905	Dictaphone
EDP 900	Introduction to Data Processing
MARK 100	Marketing
BOK 552	Bookkeeping

** "English and the Business World" is a complusory subject for all students whose native language is not English.*

*** Can be waived if student attained 100 w.p.m. in SHP 100 of SHF 100.*

† Course details appear in Academic Division.

Secretarial Practice
6 Subjects, 5 compulsory, 1 elective

Compulsory Subjects	Sept. 1976	Jan. 1977	Mar. 1977	Sept. 1977	Jan. 1978
TYP 905	•	•	•	•	•
SHP 900	•			•	
or					
SHF 900	•			•	
OP 101-A	•	•		•	•
plus					
OP 101-B	•	•		•	•
ENG 201	•	•		•	•
SHP 901	•	•	•	•	•
or					
SHF 901	•	•	•	•	•
Elective Subjects					
AS 907	•		•	•	
BM 905	•	•	•	•	•
EDP 900		•			•
MARK 100	•	•		•	•
BOK 552	•	•	•	•	•

Part Time Certificate Course Program in Records Management

This program may be of interest to all people who are presently involved in the management of business communications, EDP records, files, forms and reports, records system and procedures, retention, protection and disposal of vital records.

Persons aspiring to Management positions in these areas should find that this program is particularly helpful.

At present the program consists of the compulsory courses listed below.

RM 900
RM 901
RM 902
RM 903
MICRO 900

Accounting & Bookkeeping

Most courses start September 7, 1976

Accounting I ACC100

Tuesday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

Course Content: Fundamental principles of accounting; the entire bookkeeping cycle, including journal, posting, preparation of trial balance, adjusting and closing entries and preparation of a post-closing trial balance; controlling accounts and specialized journals; a detailed study of accounts receivable, inventory valuation, fixed assets and depreciation, natural resources and depletion; the voucher system; notes and interest; payroll accounting.
NOTE: Students enrolled in the certificate program must attain a "B" standing in order to proceed further.

Accounting II ACC102

Wednesday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

Course Content: Partnerships: formation, division of profits, admission of new partner, goodwill and revaluation of assets, dissolution and liquidation; limited companies; organization and operation, share capital transactions, retained earnings, dividends and reserves, extraordinary gains and losses; bonds payable and sinking funds; investments; departmentalization and control; manufacturing accounting.

Cost Accounting ACC202

Monday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

The course is designed for students with an accounting standing equivalent to ACC100 and 102 or for those who are currently engaged in the bookkeeping field in industry and who wish to study cost accounting. It is a compulsory subject for students enrolled in the Accounting program.
Course Content: Basic concepts, fundamental principles, materials, labour, and overhead as applied to cost accounting; the above concepts and principles utilized in the solution of simple costing problems and cost accounting techniques employed for the solution of major financial cases.

Auditing and Taxation ACC 205

Wednesday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

Course Content: Principles and practices of auditing, with particular emphasis on the understanding of a good system's design and the evaluation of internal control. Year-end verifications of assets and liabilities. Income Tax Act and its regulations. Preparation of individual and corporate tax returns.

Bookkeeping I BOK 552

Monday, 6:30-9:30 p.m.
St. James Campus
60 hours
Fee: $65.00

Course Content: Starting a bookkeeping system; recording transactions affecting balance sheet amounts; recording transactions affecting income and expense amounts; the income statement and the balance sheet; journalizing, posting and taking a trial balance; the six-column work sheet; closing entries and post-closing trial balance; special journals and subsidiary ledgers; bank reconciliations; the eight-column work sheet with adjusting and closing entries, and financial reports.

Human Relations BUS 101

Wednesday, 7:00-10:00 p.m.
St. James Campus
45 hours
Fee: $50.00

An introduction to the fundamental principles of human relations; an analysis of the general nature of man as veiwed from various thinkers, sciences and disciplines such as philosophy, psychology, economics, political science, theology, sexology, music, poetry, art, modern business management theories, etc.; an elementary examination of such topics as: Who am I? (self-awareness); effective communications; effective listening. Students are encouraged to read, research books, periodicals, and to develop a deeper appreciation that all knowledge is potentially valuable as an insight into human relations and human behaviour.

Human Resources Management BUS 211

Thursday, 7:00-10:00 p.m.
St. James Campus
45 hours
Fee: $50.00

This is a course designed to develop a student's skills in such areas as Communications, motivation, organizational skills, self-initiative, basic management techniques. The course attempts to simulate as much as possible a real business environment.

Business Management I BUS 900-A

Tuesday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

First of a two-part course for people in junior of middle management positions. Compulsory subject for the Business Management Certificate (Part-time).
Course Content: Background; orientation, definition of a manager, importance of the environment. Business in Canada; an overview, nature and importance of business history, corporate structures, participation in planning a company. Principles; decision making and policy formulation, organizing and staffing, planning and controlling, communication and directing. Management; qualifications, senior management, first line management, middle management.
Case studies for each major topic.

Business Management II BUS 900-B

Tuesday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

Second part of a two-part course for people in junior or middle management positions. Compulsory subject for students enrolled in Business Management Certificate (Part-time).
Course Content: Functions; production, marketing, financial and personnel functions. Current and future concerns; business and government, international corporations, business in the future.
Case studies for each major topic.

Women in Business BUS 903

Tuesday, 7:00-10:00 p.m.
St. James Campus
30 hours
Fee: $35.00

A practical and positive introduction to management development for women; this course will help you start your own business or move up the management ladder.
Course Content: Room at the top; self analysis and career planning, resume, business letter writing. The myths; recognizing and overcoming the discrimination against females in the management structure. The law and the business community. Accounting; bookkeeping records, one write systems, reading and analysis of a financial statement. Managing time; effective controls for profitability. Family property law; a discussion of wife's property rights, government regulations. Banking system. Budgets; financial forecasting, credit and collections. Purchasing and inventory control. Marketing and merchandising; techniques, sales forecasting, sales analysis. Public relations and advertising.

There will be a number of prominent guest speakers. Each major topic will be supplemented by film.

Self-development for Today's Woman BUS 904

Wednesday, 6:00-8:00 p.m.
St. James Campus
30 hours
Fee: $35.00

Course Content: Opportunities for women today; communication skills and tension control; makeup and fashion techniques; balancing home and career.

Marketing MARK 100

Wednesday, 7:00-10:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: Grade 12 or equivalent.
Course Content: Introduction to basic marketing concepts and practices as related to the consumer; marketing terminology, controllable and non-controllable variables, target market identification by demographic and geographic segmentation.
Compulsory Subject for Certificate in Advertising.

Marketing Research & Information Systems MARK 202

Wednesday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

Designed for the user of information rather than for the technical research specialist, the course emphasizes the definition of decision-oriented information needs and the interpretation of information results. Sampling and measurement techniques are studied. Text, cases, project.

Marketing Management I MARK 205

Tuesday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: MARK 100.
This course, with MARK 206, interrelates elements of the marketing mix that were studied separately in previous course, by comparing various strategies, their underlying causes, and relating these to product and price. Text, cases, computer simulation, project.

Marketing Management II MARK 206

Tuesday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: MARK 205.
This course provides an intensive survey of management decisions related to marketing planning and strategy, buyer behaviour, distribution and promotional strategies. The study of realistic company cases will provide the student with a deeper understanding of business problems in these areas.

Procedural Law LAW 202

Thursday, 6:00-9:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Practice and procedure before the various courts in Ontario. Rules of court and pleadings. Rules of evidence. Court officials and procedures in court offices and registries and in other registries. The role of the lawyer with respect to the courts, to other lawyers, and to the clients.

Introduction to Physical Distribution Systems PHD 100

Wednesday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

A survey course dealing with the actual movement of products, from the producer to the customer. Areas involved include communication, order processing, inventory control, material handling, warehouses and warehousing, location analysis, protective packaging and traffic management.

Physical Distribution Analysis PHD 102

Thursday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

Course Content: Managerial tools of analysis and decision-making; quantitative tools of management; distribution analysis and planning.

Introduction to Records Management RM I RM 900

Wednesday, 6:00-9:00 p.m.
St. James Campus
52 hours
Fee: $60.00

Course Content: This basic course is designed to introduce the student to the broad range of subjects covered by Records Management: Lectures, syndicate exercises and discussions will help to define problem areas, possible solutions and benefits that can be gained by better control of all records. Emphasis is on training the student for supervised work.

Advanced Records Management RM II RM 901

Wednesday, 6:00-9:00 p.m.
St. James Campus
52 hours
Fee: $60.00

Prerequisite: RM 900.
Course Content: An in-depth study of the subjects covered in RM 900 will help to develop further previously acquired knowledge. Syndicate exercises and discussion of relevant topics will help to provide the practical back-ground necessary for management positions in the profession.

Forms RM III RM 902

Thursdays, 6:00-9:00 p.m.
St. James Campus
52 hours
Fee: $60.00

Course Content: This is an advanced course, designed to provide the student with the specific knowledge and management, and paper work simplification. Lectures, syndicate exercises and discussions will again be the vehicles to allow maximum participation from students, who are encouraged to bring work-related problems for solution.

Manuals Management RM V RM 903

Wednesday, 6:00-9:00 p.m.
St. James Campus
52 hours
Fee: $60.00

Course Content: Introduction; program elements, production procedure I; production procedure II; effective writing I; effective writing II; caption writing; playscript writing; directives control; supplies; correspondence management; correspondence standards; course review.

Microfilm For Your Business MICRO 900

Tuesday, 6:00-9:00 p.m.
St. James Campus
30 hours
Fee: $55.00

Course Content: Advanced microfilming techniques; demonstration of representative microfilm applications; advantages and disadvantages of various microforms; objective analysis of equipment in terms of specific applications.

Introduction to Data Processing EDP 900

Wednesday, 6:00-9:00 p.m.
St. James Campus
45 hours
Fee: $50.00

This course provides an overview of business data processing which will prepare the participant for further study in the areas of programming and systems analysis. Topics include hardware and software features, programming languages, flowcharts, and programming experience.

Cobol I EDP 101

Tuesday, 6:00-9:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Language mechanics of COBOL are introduced and students gain practical experience by writing programs to solve business type problems. Emphasis is placed on documentation of programs.

IBM/370 Assembler I EDP 102

Mondays, 6:00-9:00 p.m.
St. James Campus
45 hours
Fee: $50.00

This course introduces IBM/370 architecture and discusses in detail the components of the IBM/370 series of computers. Topics include hardware and software features while emphasizing programming in Assembler language.

Cobol II EDP 200

Tuesday, 6:00-9:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: A "C" standing in COBOL I or equivalent.
Applications such as accounts receivable and payroll are the subject of programming assignments. Techniques include sorting, summarizing and master file update.

Systems Analysis I EDP 202

Tuesday, 6:00-9:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: EDP 900 or equivalent.
This introductory course in systems analysis is designed to acquaint students with the important role of the computer in business. A number of business computer applications are used to illustrate the effectiveness of the computer as a tool for management. Students gain an insight into the criteria applied by managers in deciding how the computer should be used.

Programming I EDP 103

Monday, 6:00-9:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: EDP 100 or equivalent.
The objective of this course is to provide a thorough knowledge of the programming techniques used to solve business applications. Topics include accounting, marketing and physical distribution problems and the participant is encouraged to use the computer as a powerful tool for management.

Advanced Problem EDP 204

Monday, 6:00-9:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: Approval by the Instructor.
Applications requiring several interactive programs and involving the use of direct access storage are designed by the class. Individually, students write the necessary programs to install and maintain the applications. COBOL is the primary language, however, techniques for insertion of segments in other languages are introduced.

IBM/370 Assembler II EDP 205

Monday, 6:00-9:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: A "C" standing in Assembler I or equivalent.
This advanced course in programming the IBM/370 series of computers focuses on many of the powerful features of Assembler language. Case studies and comprehensive problems encourage programming proficiency while extending the programmer's knowledge of applications.

Systems Analysis II EDP 206

Wednesday, 6:00-9:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: A "C" standing in Systems Analysis I or equivalent.
This advanced course on Systems Analysis involves active participation in problem investigation and encourages analytical examination of facts prior to the presentation of a proposed solution.

Insurance Courses Leading to A.I.I.C. or F.I.I.C.

Principles and Practice INS 900

Monday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Introducing the Insurance business; the organization and operation of Insurance; Law; basic documents — applications; binders and policies; from application to expiry; reinsurance; federal and Provincial controls; production of business; adjusters; underwriters' associations or boards; history; how to read a policy.

Property I INS 901

Wednesday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Basic fire insurance policy, extended coverage endorsement; Insurance Act provisions — fire insurance; Fire Statutory Conditions; coconcepts relating to property insurance, coinsurance, mortgage clauses; dwelling fire insurance coverages; dwelling extended coverage endorsement; introduction to inland marine and multi-peril, general features of inland marine and multi-peril forms and underwriting of these forms; householders' named perils, personal effects floater, fine arts policy, miscellaneous coverages; composite dwelling policy, homeowners' policy, tenants' package policy; co-operatives and condominiums.

Property II INS 902

Tuesday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Business fire coverages; extended coverage endorsements E.C.K.L.J. rating; fundamental principles and purposes of underwriting; practice of underwriting; the mechanics of underwriting; insurance plans; plan drawing; mercantile coverages and commercial coverages designed for specific purposes; bailees; coverages; real property insurance; basic fire policy; survey practice.

Liability INS 903

Thursday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

The law of Negligence — Common Law — basic principles, the courts, employer and employee, independent contractors, dangerous things, animals, children and parents, damages, liability of owners and occupiers for dangerous land or premises, public authorities, conflict of laws, fatal accidents, defences.
The Law of Negligence — Province of Quebec.

Insurance on the Person INS 904

Wednesday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

History, types of policies, premiums, multi-party policies, computation of premiums — mortality, interest, expenses; office reserves — policy values, annual statements; savings and protection — uses of policies, effect of taxation; the Insurance Act; underwriting life insurance; business life insurance, pension plans, group insurance, equity investments, agency systems.
Accident and Sickness — history, the Insurance Act, Statutory Conditions; coverages, underwriting, group insurance.

Automobile INS 907

Tuesday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Introduction and development, and applications in general, applications for Owner's form (S.P.F. I); Owner's form — Section A — Third Party Liability; Owner's form — Section B Accident Benefits coverage; Owner's form — Section C — Own damage; General provisions, definitions and exclusions; Automobile insurance law and Statutory Conditions; endorsements which may be used with Owner's form; Non-owned Liability insurance; garage coverages; automobile insurance variations in the provinces; financial responsibility laws; highway victims indemnity funds; absolute liability, filing proof of financial responsibility; facility; compensation without fault; rating, claims.

Burglary and Fidelity INS 905

Tuesday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Definitions, policy conditions; Robbery insurance — interior messenger and paymaster robbery (hold up) policy; Burglary insurance — safe burglary policy, mercantile stock burglary, damage to buildings by burglary or robbery; Theft insurance — church theft, residence theft; Broad form coverage — money and securities policy (broad form); Safe deposit box policies — standard safe deposit box policy (lessee's burglary and robbery cover), lessee's cover (broad form), lessor's cover (blanket insurance), lessor's cover (liability insurance); fidelity, forgery; Package policies — comprehensive dishonesty, disappearance and destruction policy, office — store burglary and robbery, broad form storekeepers, brokers blanket bonds; physical protection; underwriting; rating; claims.

Loss Adjustment and Claim Settlement INS 908

Wednesday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Adjusting in general, the adjuster's obligations, ethics; the contract — definition of terms, types of contract; relationships — waiver and estoppel, non waiver agreements, proximate cause, without prejudice, reports; subrogation; aids to implementing adjustments — catastrophe plan, arbitration agreements, Insurance Crime Prevention Bureau, guiding principles; first party claims; public liability insurance; products liability; professional liability; bond claims — fidelity and surety; preserving the evidence; litigation; termination of a claim.

Casualty Covers INS 909

Thursday, 5:30-9:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Glass Insurance — policy coverage, underwriting, claims; Surety bonds — underwriting terms, principles of suretyship, miscellaneous bonds, contract bonds, fiduciary bonds, administration bonds, underwriting, cancellation, surety claims procedure; Boiler and machinery insurance — history, main classes of objects for insurance, the policy, schedules and endorsements, rating, indirect insurance; Aviation insurance — aviation aircraft liability insurance, underwriting and rating, endorsements, additional coverages, aviation general liabilities, premises and operations liability, hangarkeeper's liability, products and completed operations liability, employer's liability and workmen's compensation, aviation accident insurance, air cargo liability insurance; miscellaneous coverages — water damage insurance, weather insurance, crop hail insurance, live stock mortality insurance, commercial credit insurance.

Fire Prevention and Protection INS 910

Thursday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Principles and practice of fire equipment; hand operated fire extinguishing equipment; automatic sprinkler protection and other special fire extinguishing equipment; private fire alarm services and equipment; public fire protection.

Business Interruption INS 911

Monday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Purpose, terminology, insured perils, policy periods — indemnity period, American vs. British approach, insurable interest.
Earnings insurance no co-insurance, gross earnings, insurance, profits insurance, other forms, some practical points, loss adjustment.

Property Loss Adjustment INS 912

Thursday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Obligations of the insured and insurance company in event of loss; the adjuster — his investigation and reports; the policy; determining the loss; determining the cause and point of origin of fires; criminal code offences; coinsurance, pro-rata distribution, apportionments; guiding principles; arbitration; miscellaneous coverages; special procedures; business interruption; extended coverage; forms and documents; aids to implementing adjustment.

Insurance Accounts and Finance INS 913

Wednesday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Government control of insurance companies; general principles of bookkeeping and insurance accounts, systems and methods, inter-relationship of accounting and statistical departments; books and records of original entry and subsidiary ledgers, general ledger, profit and loss account and balance sheet, premium reserves and loss reserves; collection and credit; agents accounts; reinsurance accounts; statistics; taxation of general insurance companies; investments.

Insurance Administration and Essentials of Management INS 914

Monday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Nature and importance of management, development of management through, moral and social dimensions of management, international management and its environmental dimensions; head office organization; decision making and policy formulation; branch and agency organization; organization and staffing; planning and controlling, communicating and directing; the behavioral sciences in management; managerial economics, managerial accounting; quantitative methods of analysis; the forms and uses of statistical returns; information systems and computers; manufacturing management; buildings and equipment; financial management; insurance publicity.

Fire Hazards INS 915

Wednesday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

A comprehensive study of fire hazards in general and building construction, in particular.
Within these terms of reference this course covers the various types of building materials, and treats in descriptive and graphic forms, many types of structure — with special emphasis on fire resistance.
The course draws attention to the study of fire hazards such as those attending heating, lighting, and housekeeping, and to the relationship of these hazards to ignition, combustion — as well as to volatility and flammability.

Bodily Injury Claims INS 916

Thursday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Course Content: Investigation and Background, Anatomy, Bodily Injury, Bodily Injury Treatment, Interpretation of Medical Reports, disability, Rehabilitation, the Evaluation, Negotiation and Settlement of Bodily Injury Claims.

Principles and Practice of Marine INS 923

Wednesday, 5:30-8:30 p.m.
St. James Campus
36 hours
Fee: $50.00

Function of marine insurance; marine insurance and trade; marine insurance markets; associations; Lloyds; insurance accounts; effecting insurance; types of policies; the policy form — construction, principles of interpretation, wording; the voyage; the vessel; insured perils; assignments; definitions of pertinent terms; losses; the adjustment; general average; salvage, double insurance, subrogation, returns of premium; Hull insurance clauses, Institute Time clauses, Canadian and American clauses, Cargo clauses, other frequently used clauses; floating policies; open covers; reinsurance; Marine Insurance Act; York-Antwerp Rules; average adjusters.

Clerical and Secretarial Skills

Court Procedures BUS 308

Wednesday, 7:00-10:00 p.m.
St. James Campus
45 hours
Fee: $50.00

The purpose of this course is to familiarize the student with the duties performed by a court reporter and the manner in which a court functions.

Typing and Office Practice OP 101-A

Monday and Wednesday,
6:00-9:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: TYP 901 or 25 w.p.m. In Typing, good command of English.
First of a two-part course in Typing and Office Practice which is designed to prepare students for a variety of jobs in the clerical field.
Course Content: The challenge of the modern business world; securing the job you want; improving your clerical typing techniques; working skillfully with office forms and supplies. Performing general office duties: postal and other services, processing office mail, filing.

Typing and Office Practice OP 101-B

Tuesday and Thursday, 6:00-9:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: OP 101-A or TYP 905.
Course Content: Performing additional office duties: telegraphic messages and services; bank and credit services; mechanized office operations advancement on the job; further development of typing skills.

Legal Office Practice OP 203

Tuesday and Thursday, 6:00-9:00 p.m.
St. James Campus
150 hours
Fee: $155.00

Prerequisites: A good facility in any short hand, English at the Grade 12 level or equivalent, and 45 w.p.m. in typing.
Course Content: Legal correspondence, docket, entries and accounts, legal forms and methods of diaries, reminders and filing systems; real estate transactions, deeds and transfers, mortgages and charges, statements of adjustments, insurance and reporting letters; civil litigation, court documents, actions, matters, appeals, wills, incorporating an Ontario company.

Medical Office Practice OP 205

Tuesday and Thursday, 6:00-9:00 p.m.
St. James Campus
120 hours
Fee: $125.00

Prerequisites: Grade 12 English, typing speed at 45 w.p.m., 80 w.p.m. in any short hand system; or Dictaphone or eight 15-line letters per hour; also ANAT 100 (Medical Terminology). ANAT 100 may, however, be waived under certain circumstances.
Course Content: To further develop typing skills with emphasis on handling the daily routine of a doctor's office — including appointments, correspondence, patient files and medical forms, OHIP and Workmen's Compensation forms, and the assignments involved when part of a hospital dicta-typing pool.

Typewriting A (Beginning Typewriting) TYP 901

Monday and Wednesday, or
Tuesday and Thursday, 6:00-9:00 p.m.
St. James Campus
90 hours
Fee: $95.00

Prerequisite: Basic knowledge of English.
The purpose is to: (a) achieve a mastery of the keyboard using the touch system, plus an introduction to basic typewriting setups; (b) achieve 25 w.p.m. on five-minute tests.
Course Content: All the keys will be taught with special emphasis on the touch system (posture, good stroking, rhythm and correct fingering are an integral part.) The names, care, and proper manipulation of the parts of the machine will be introduced as required. The rules of syllabication and capitalization, an introduction to basic centering, tabulation and letters, plus typing of value for personal use.

Dictaphone BM 905

Monday and Wednesday, or
Tuesday and Thursday, 6:00-9:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: A thorough knowledge of business English, spelling and setup of letters (minimum of grade 11), plus a typing speed of 45 w.p.m.
Designed to prepare the student to become an accredited dictaphone secretary, with an initial capacity of 60 fifteen-line letters a day.
Course Content: Typing from dictabelt records put out by the Dictaphone Corporation.

Typewriting (Advanced Typewriting) TYP 905

Monday and Wednesday or
Tuesday and Thursday, 6:00-9:00 p.m.
St. James Campus
90 hours
Fee: $95.00

Prerequisite: 25 w.p.m. or TYP 901.
The purpose is to: (a) further develop typewriting skills and to concentrate on more advanced typewriting setups; (b) achieve 40 w.p.m. on ten-minute tests.
Course Content: During this course, emphasis will be placed on practical typing of tabulation-tables, and financial statements; centering of menus, programs, announcements; business letters — different styles, placement, carbon copies and envelopes; essential business forms; erasures and corrections; squeezing and spreading; duplicating — the typing of dittos, stencils, and offset masters; skill development to bring the typist up to 40 w.p.m. or better on ten-minute tests.

Basic Typewriting — Lumisonic TYP 900

One hour per night — four nights per week — ten weeks
40 hours
St. James Campus
Fee: $45.00

An intensive course in keyboard typewriting, taught using the lumisonic system; designed to develop quickly a high keyboard typing speed.
Course Content: The first six hours will be spent learning the keyboard with emphasis on posture, good stroking, rhythm and correct fingering. Later lessons will develop speed and accuracy to a high degree using modern, programmed instructional techniques. This course is primarily designed as a first step towards a keypunch operators course.

Typing — Speed Development TYP 902

Monday to Thursday, 6:00-8:00 p.m.
64 hours
Monday to Friday, 1:30-3:30 p.m.
64 hours
St. James Campus
Fee: $70.00

A course on electric typewriters designed for persons with previous typing experience. A typing speed of approximately 50 w.p.m. with a high degree of accuracy is the objective of this course. This will be achieved through remedial and corrective drills as well as sustained timed writings.

Pitman Shorthand — Refresher Course SH 900

Tuesday and Thursday, 6:00-9:00 p.m.
St. James Campus
90 hours
Fee: $95.00

Prerequisite: Grade 12 English or equivalent; a reasonable knowledge of the theory.
Course Content: Quick review of the principles of Pitman Shorthand; emphasis on facility in the use of short-forms, contractions, intersections and phrases; attention to development of speed.

Shorthand — Advanced Speed Level SH 901

Saturday, 9:30-12:30 p.m.
St. James Campus
90 hours
Fee: $95.00

Prerequisite: The ability to write 120 w.p.m.
Course Content: Dictation of business letters, legal and literary matters, jury charges, court testimony; emphasis on the basic techniques required to attain high speeds in shorthand; high speed phrasing and short cuts.

Pitman Shorthand — Theory SHP 900

Tuesday and Thursday, 6:00-9:00 p.m.
St. James Campus
150 hours
Fee: $155.00

Prerequisite: Grade 12 English or equivalent.
Course Content: Theory of Pitman shorthand, common short-forms and phrases; development of a high frequency vocabulary common to all dictation.

Pitman Shorthand — Speed Development SHP 901

Tuesday and Thursday, 6:00-9:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: SHP 900 or equivalent, and 45 w.p.m. in typewriting, plus grade 12 English or equivalent.
To further develop facility in writing shorthand of average commercial difficulty at speeds up to 120 w.p.m., and in transcribing from notes at the typewriter.
Course Content: Development of skill in writing and reading shorthand notes, with emphasis on short-forms and phrases; practice in transcribing notes at the typewriter in acceptable, mailable form.

Forkner Shorthand — Theory SHF 900

Tuesday and Thursday, 6:00-9:00 p.m.
St. James Campus
120 hours
Fee: $125.00

Prerequisite: Grade 12 English or equivalent and a minimum of 35 w.p.m. in typewriting.
This level provides a basis for the development of speed in writing shorthand.
Course Content: A presentation of the principles of the system, together with extensive dictation which begins as early as lesson 5. The average student can attain speeds of up to 80 w.p.m. in this course.

Forkner Shorthand — Speed Development SHF 901

Tuesday and Thursday, 6:00-9:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: Completion of theory level, plus grade 12 English or equivalent, and 45 w.p.m. in typewriting.
For persons desiring to develop facility in writing Forkner shorthand at speeds up to 120 w.p.m.
Course Content: Development of facility in writing and reading shorthand notes within the 3,000 word high-frequency range which makes up 97% of all ordinary dictation material; practice in transcribing notes at the typewriter.

Bookkeeping II BOK 900

Wednesday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: BOK 552 or equivalent.
The course will briefly review basic bookkeeping procedures and continue on to more specialized areas.
Course Content: Miscellaneous general journal entries; synoptic journal; voucher and inventory systems; budgets, bad debts, depreciation, accruals.

Machine Shorthand — Theory SHM 900

Monday and Wednesday, 6:00-9:00 p.m.
St. James Campus
150 hours
Fee: $155.00

Prerequisite: Grade 12 English or equivalent.
Provides a basis for the development of speed in shorthand.
Course Content: Theory of machine shorthand, common short-forms and phrases; dictation; facility in note-taking from material of limited vocabulary.

Machine Shorthand — Speed Development SHM 901

Monday and Wednesday, 6:00-9:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: SHM 900 or equivalent, plus grade 12 English or equivalent,and 45 w.p.m. in typewriting.
To develop facility in writing shorthand of average commercial difficulty at speeds up to 120 w.p.m. and transcribing notes in acceptable mailable form.
Course Content: Continuation of SHM 900 above.

General Accounting I (Intermediate) ACC 200

Wednesday, 6:30-9:30 p.m.
St. James Campus
45 hours
Fee: $50.00

The emphasis is on accounting from the point of view of management analysis and control. Topics include capital and debt structure of a limited company analysis of financial statements and statements of sources and applications of funds, taxes and their influence on business decisions, budgeting and its use by management for planning and control.

For further information about part-time courses in Business and Commerce telephone 967-1212 ext. 298.

Real Estate

An Introduction to Real Estate — Segment I RE 900A

Casa Loma Campus
30 hours
Fee: $65.00

Course Content: This course covers the following topics: ownership of real property; real estate as an investment; to own or to rent?; how much should we pay?; financing a purchase; financing — government plans; benefits and services of broker; a career in real estate; relationship of principal and agent; the typical real estate transaction.

An Introduction to Real Estate — Segment II RE 900B

Casa Loma Campus
60 hours
Fee: $105.00

Prerequisites: Evidence of completion of Segment I: 75% pass mark on the examination for Segment I; Real Estate Sales Training Package.
Course Content: This course covers the following topics: introduction; real estate and the economy; the Real Estate and Business Brokers Act; the broker — salesman relationship; ethics; municipal regulations; subdivision control; introduction to land descriptions; construction; evaluation; advertising; mortgages; agency law; statutes affecting the Real Estate business; parties to contract; contract law; agreement of purchase and sale.

An Introduction to Real Estate — Segment III RE 900C

Casa Loma Campus
60 hours
Fee: $135.00

Prerequisites: Evidence of completion of: Segment II; 75% pass mark on examination for Segment II.
Course Content: This segment is comprised of case studies designed to give participants an opportunity to focus on practical situations they would encounter in a day to day Real Estate operation.

NOTE: For further information about Real Estate courses, phone 967-1212, ext. 595.

COMMUNITY SERVICES

Community Services

Child Care Worker Diploma Program

This program is offered on a part-time basis to men and women working full-time with emotionally disturbed children or troubled adolescents who are unable to attend a full-time course of studies.

Applications and information may be obtained from the Division of Community Services, George Brown College, Box 1015, Station "B", Toronto. M5T 2T9, Telephone No. 967-1212 local 634 or from the Admissions Office, Kensington Campus.

The following courses leading to the Diploma will be offered.

Human Growth and Development CHI 161

Wednesday, 3:00-5:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

The normal growth of the child is followed from birth to adolescence, including physical, emotional and intellectual development. The emphasis is on the first six years of the child's life and emotional growth during this time.

Caring For The Disturbed Child CHI 164

Wednesday, 5:00-7:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

The purpose of this course is to arrive at a treatment philosophy. Class discussions are based on students' observations from field placement. Emphasis is placed on areas of basic care and understanding of behaviour of children and staff.

Activities With Children CHI 165

Wednesday, 7:00-9:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

This course will explore a variety of media through play and investigate broad areas of activities that require specific skills of the child. It is the essence of play that the experience is more important than the result. It is through the "doing" that structure actually emerges; the form of anything is latent in the process.

Group Process CHI 172

Wednesday, 3:00-5:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

This course introduces students to the processes of social interaction and methods of observation through research and laboratory experiments and to encourage a more appreciative awareness of individual styles and strengths in group participation.

Introductory Sociology SOC 171

Wednesday, 5:00-7:00 p.m.
Kensington Campus
30 hours
Fee: $35.00

Readings and discussion of the basic concepts in sociology will be used in analyzing various aspects of Canadian Society in intergroup relations, rural and urban communities, social classes and social institutions.

Childhood Psychopathology CHI 261

Wednesday, 7:00-9:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Discussions include comparison of normal and abnormal development according to the personality theories of Freud, Erikson, descriptions and functioning of defences and study of specific categories of disturbance (i.e. autism, Schizophernia, etc.)

Caring For The Disturbed Child CHI 262

Wednesday, 3:00-5:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

A continuation of Caring I, emphasizing the development of treatment plans for disturbed children on an individual basis.

Treatment Philosophies CHI 268

Wednesday, 5:00-7:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

An introduction to therapeutic approaches extant in child pyschiatry and the mental health field today. Major theories underlying the chosen methods of treatment are discussed.

Working With Families CHI 272

Wednesday, 7:00-9:00 p.m.
Kensington Campus
30 hours
Fee: $35.00

This course will explore the particular concerns and problems which arise in working with parents and families. Consideration is also given to teacher-child-child care worker relationships.

Field Practice CHI 160

Fee: $65.00

Field practice is an integral part of the program in affording students supervised clinical experience in a variety of settings. Field experience is considered an essential concomitant to the behavioural sciences.

Field Practice CHI 260

Fee: $65.00

A continuation of CHI 160.

Day Care Worker Program

The part-time program leading to the Day Care Worker Program is offered to men and women who are unable to attend a full-time course of studies and who are working with young children.

More detailed information regarding this program may be obtained from Linda Williamson, Division of Community Services, George Brown College, Box 1015, Station "B", Toronto, M5T 2T9, Telephone 967-1212 local 672.

The following courses will be offered in the Fall semester.

Infant and Child Development DCW 100

Tuesday, 6:00-9:00 p.m.
Kensington Campus
45 hours
Fee: $50.00

A look at development from birth to 2 years from the perspective of (1) heredity and environment; (2) growth and maturation; (3) learning, motivation and emotion; (4) language, and (5) intelligence. A discussion of relevant infant care routines and programs and the adult's role in those programs.

Creative Expression in Childhood **DCW 105**

Thursday, 6:00-9:00 p.m.
Kensington Campus
45 hours
Fee: $55.00

This course will explore the creative process: what activates it; how it functions; how its universal aspects have implications in the modes of learning and self-expression of the growing child. Accordingly, the course will investigate play and a variety of day care settings.

Addiction Counsellor Diploma Program

This program is offered on a part-time basis to men and women who are unable to attend a full-time course of studies.

Preference is given to students who are employed in the field of addictions or related areas. Applications and information may be obtained from the Division of Community Services, George Brown College, Box 1015, Station "B", Toronto, M5T 2T9, Telephone No. 967-1212, local 634 or from the Admissions Office, Kensington Campus. An admission interview is required; details of registration will be made available to those accepted in the program.

The following courses leading to the Diploma will be offered during 1976/77.

Human Growth and Bahaviour AD 101

Wednesday
Kensington Campus
45 hours
Fee: $50.00

A sequential view of the process of human growth and personality development as a means to develop some understanding of the physical, socio-cultural and emotional aspects of development throughout the life span.

Practice & Method of Counselling AD 106

Wednesday
Kensington Campus
45 hours
Fee: $50.00

A study of the therapeutic procedures and treatment philosophies related to personality patterns; Freudian theories of personality development will be used as a base from which to analyse the development of current treatment philosophies including those of Alder, Jung, Erikson, Rogers, Maslow, Glasser and others. Various techniques used in practice in individual group and family therapy will be demonstrated.

Group Process AD 102

Wednesday
Kensington Campus
45 hours
Fee: $50.00

Students meet regularly in a group seminar, thus experiencing the dynamics of group interaction. The group process is used as Interpretive behavioural material.

Sociology SOC 107

Wednesday
Kensington Campus
22½ hours
Fee: $27.50

A survey of the field of sociology; culture and society, institutions, organizations, ecology and population, disorganization and deviant behaviour ethnic communities and other aspects of group living.

Field Practice AD 100

Fee: $85.00

(Registration for this course requires the approval of the program coordinator).

Field practice is an integral part of the program in affording students supervised clinical experience in a variety of settings. Field experience is considered an essential concomitant to the behavioural sciences.

Human Growth and Behaviour AD 201

Wednesday
Kensington Campus
45 hours
Fee: $50.00

A sequence of AD 101, the emphasis here is on abnormal development and dysfunction.

Practice and Method Counselling AD 206

Wednesday
Kensington Campus
45 hours
Fee: $50.00

Continuation of AD 106.

Group Process AD 202

Wednesday
Kensington Campus
45 hours
Fee: $50.00

Continuation of AD 102.

Social Services, Problems and Issues AD 103

Wednesday
Kensington Campus
22½ hours
Fee: $27.50

A study of the development and adaptation of institutions in response to community needs and pressures. Levels of responsibility: federal, provincial, municipal and private. The development of agencies providing education, health, welfare and other forms of service. Philosophies concerning the role of law in controlling alcohol and drug use, and the relevant legislation.

Field Practice AD 200

Fee: $100.00

(Registration for this course requires the approval of the program coordinator).

Continuation of AD 100.

Sociology AD 207

Thursday
Kensington Campus
22½ hours
Fee: $27.50

Sociology of institutions. Special emphasis on the functions of the family as it is understood in various ethnic communities. The changing role of the family. The sociology of deviant behaviour.

Ethics, Values and Professionalism AD 108

Thursday
Kensington Campus
22½ hours
Fee: $27.50

The purpose of this course is to encourage study and examination of the values and value conflicts involved in being a counsellor and how these values relate to professional practice.

Community Practice AD 211

Thursday
Kensington Campus
22½ hours
Fee: $27.50

Application of the therapeutic "Growth" model to community problems and dysfunction.

Health Care Aide Program

The program provides a basic training for those who wish to work with patients in long-term or chronic care facilities. Under the supervision of a registered nurse the health care aide provides personal care for the comfort and safety of residents and is involved in the process of creating a climate to promote the optimal physical, social and emotional well-being of each resident.

The Health Care Aide Certificate was developed by and is recognized by the Ministry of Health, the Ministry of Colleges and Universities and the Ministry of Community and Social Services.

Admission requirements:
- grade 10 — mature persons nineteen years and over with less than grade ten will be considered individually.
- facility with English
- a personal interview is required

Length of Program — 456 hours — offered part-time in both day and evening courses.

Details of starting dates and registration may be obtained from Division of Community Services, George Brown College, Box 1015, Station "B", Toronto M5T 2T9.

Course Descriptions

CARE 900 Communication — This course promotes a better understanding of the cultural patterns and social values of the institutional population. Verbal and non-verbal communication along with the effective use of English are emphasized.

CARE 901 The Human Body — Students will be introduced to normal body processes and the physical changes which occur during the life cycle. Nutritional needs to maintain health with special reference to the needs of the elderly will be considered.

CARE 902 Personal Care — In this course the students will be taught the basic principles of patient care with emphasis on the needs of residents in long-term facilities. The student will gain practical experience in an institution as well as receive classroom lecture and demonstration.

CARE 903 Social and Emotional Needs — This course examines the basic social and emotional needs of individuals as a background to understanding the emotional and mental changes which occur with aging, and institutionalization.

CARE 904 Activation — Methods of remotivation and means of minimizing the disabling effects of aging and chronic disease are demonstrated in the course. Practical experience in an institution will permit opportunity for the student to apply the demonstrated skills.

Hearing Impaired

Total Communication (Part I) DEAF 900

Monday, 5:00-7:00 p.m. or 7:00-9:00 p.m.
Casa Loma Campus
45 hours
Fee: $50.00

Course Content: An introductory course designed for those who come in frequent contact with, or work with, the deaf. The course is designed to give fluency in one-way conversation with a deaf person.
Two classes may be held depending upon enrolment. One class will commence at 5:00 p.m. and complete at 7:00 p.m., the other class from 7:00 p.m. to 9:00 p.m.

Total Communication (Part 2) DEAF 902

Monday, 7:00-9:00 p.m.
Casa Loma Campus
45 hours
Fee: $50.00

Course Content: The second part of the course is designed to give the student the ability to carry on a normal two-way conversation with deaf persons.

Total Communication (Part 3) DEAF 906

Monday, 7:00-9:00 p.m.
Casa Loma Campus
45 hours
Fee: $50.00

Course Content: Development of the manual skills taught in Part II. Opportunities to practise before groups of hearing impaired people: (a) seminars, (b) meetings.
Development of the ability to convey the thought, intent and spirit of a speaker and to maintain the dignity and purity of the language of signs.

NOTE: For further information concerning Hearing Impaired courses phone 967-1212 ext. 433

ELECTRO MECHANICAL

Electro-Mechanical

General Machine Shop (Upgrading) MACH 906A

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00
Materials: $10.00

Prerequisite: For people with some machine shop experience.
Course Content: Theory and practical assignments in shop mathematics; benchwork, drills and drilling, bandsaws, lathes, milling machines, surface and cylindrical grinders.

General Machine Shop (Pre-Job) MACH 906B

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00
Materials: $10.00

Course Content: Theory and practical assignments in shop mathematics; benchwork; drills and drilling; bandsaws, lathes, milling machines, surface and cylindrical grinders.

Lathework MACH 141

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00
Materials: $10.00

Prerequisite: MACH 140 or equivalent.
Course Content: Lathe construction, operation, safety and accessories; theory of metal cutting, sharpening tool bits, plain turning, knurling, drilling, counter boring and tapping, form turning; steady and follower rest work; four jaw chuck work; taper theory and taper turning; profile turning; thread types; theory and cutting; single and multiple start threads; eccentrics; boring; turret lathe theory; spring winding, grinding attachments.

Measurement and Layout MACH 140

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Basic types of measuring tools, gauges, indicators, micrometers, verniers, optical testing tools, surface finish, surface plate, scribers, surface gauge; dividers, punches, rules, calipers, angle plates, squares, vernier height gauges, protractors; indexing; plain and rapid, co-ordinate measurement; sine bar.

Mechanical Maintenance — Part I MILL 900A

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Belt drives, chain drives, gears, shafts, keys, coupling, bearings, variable speed transmissions, clutches, brakes and seals.

Mechanical Maintenance — Part II MILL 900B

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: MILL 900A.
Course Content: Basic hydraulic and pneumatic principles; components and circuits; air compressors, conveyor types and components; trouble-shooting and servicing.

Numerical Control I MACH 904

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: General machining experience.
Course Content: Applications, justification; axes; co-ordinates, quadrants; systems, tapes and codes; programming point to point and continuous path systems; tape preparation and editing; 2-axis milling machine programming, set-up and operation; basic computer programming.

Numerical Control II MACH 905

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: MACH 904 or previous part programming experience.
Course Content: History; computer assist N/C language; APT and AD-APT systems; hardware, software, AD-APT system structure; AD-APT; co-ordinator system, part geometry; tools-to-geometry, relationships, part surface, drive surface, check surface, extended capabilities; AD-APT statements, vocabulary, symbols and punctuation; geometric words, logical structure in describing, part geometry; tool motion, tool description statements, motion statements, motion termination.
Note: This is a practical hands-on N/C computer course. This program will run when sufficient enrollment is achieved.

Welding I WELD 900

Tuesday or Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00
Materials: $15.00

Prerequisite: Ability to understand English well enough to absorb instruction.
Course Content: Basic principles of oxyacetylene and electric arc welding; safety precautions; types and uses of various oxyacetylene flames; types and uses of various rods and electrodes; braze welding; use of fluxes, arc welding machine controls; practice welding in the flat position using oxyacetylene and electric arc equipment.

Welding II WELD 901

Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00
Materials: $15.00

Prerequisite: WELD 900 or equivalent experience.
Course Content: Theory of alternating and direct current; polarity; shielded arc electrodes; classification and selection of electrodes; edge preparations, joint design; weld faults; manufacture and storage of oxygen and acetylene; basic welding metallurgy; practice welding of fillet, lap, and butt joints in the flat, horizontal, and vertical positions using oxyacetylene equipment; practice welding of fillet and lap joints in the flat, horizontal and vertical positions using electric arc equipment.

Welding III WELD 907

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $77.00
Materials: $18.00
Prerequisite: WELD 900 and WELD 901, or equivalent experience.
Course Content: Selection of electrodes; function of cellulose and low hydrogen coatings; electrode operating characteristics; control of weld faults; set-up and adjustment of machine controls; techniques required for "all position" welding; control of distortion; testing of welds; practice welding of fillet and lap joints in all positions and an introduction to groove joints in all positions. Cellulose and low hydrogen electrodes will be used.

Welding Pre-Certification (A.S.M.E.) WELD 903

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $77.00
Materials: $33.00

Prerequisite: WELD 900, WELD 901 and WELD 902 or equivalent experience.
Course Content: Safety precautions; function of electrode coatings; electrode selection and application; edge preparation, weld faults, welding techniques; setting up of equipment; testing of welds and operators, codes; practice welding of groove joints in all positions, using cellulose and low hydrogen electrodes; root and face guided bend test specimens will be taken from butt welds in all positions.

Welding Ornamental Metalwork WELD 909

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $77.00
Materials: $8.00

Course Content: Fundamentals of welding, safety precautions, selection of materials; fundamentals of design, use of hand tools, methods of twisting, forming and fastening metals; forming of scrolls; surface decoration, surface finishing; use of metal working equipment; practical shop work consisting of the fabrication of various types of ornamental metal projects.

Welding Aluminum and Stainless Steel (G.T.A. and M.I.G.) WELD 910

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $82.00
Materials: $48.00

Prerequisite: WELD 900 and WELD 901 or a minimum of six months continuous experience in oxyacetylene or arc welding.
Course Content: Setting up and adjusting G.T.A. and M.I.G. equipment; types, sizes and uses of tungsten electrodes; types and sizes of filler wires, use of shielding gases; flowmeters; practice welding of light gauge aluminum and stainless steel sheet using the G.T.A. process and welding of aluminum plate using the M.I.G. process.

Electrical Apprentice Review EL 900

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Designed for those apprentices who are in their final term and who expect to write the qualifying examination sometime within the year.
Course Content: Theory, code and equipment over the entire area of apprenticeship training.

Estimating For The Electrical Trade EL 901

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Journeyman electrician, fifth term apprentice, or equivalent.
Course Content: Plan analysis; take-off procedure, transferring and pricing; labour units; installation only projects; adjustments for working conditions; cable poles; pull boxes; labour cost variables; non-productive labour; incidental and direct job cost; electric heating loads.

Hydro-Electric Power Commission Regulations EL 902

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: At least fifth term apprentices, or journeymen.
Course Content: Authority, interpretations, use of the index, application of regulations.

Electrical Drafting (Basic) A.T.E.C. Program EL 903

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Lettering; use of instruments, linework, orthographic projection, dimensioning, sections, architect scale; isometric projection; sketching; electrical and electronic symbols, basic electrical circuit diagrams; transformers, relays, riser and block diagrams; residential wiring, illumination and electric heating.

Lighting Fundamentals EL 904

Wednesday, 7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Course Content: Nature of light; the eye and the relationship between light and sight; lighting terms; laws and controls; light measurement and meters; light sources, its production and characteristics, including incandescent, gaseous discharge and fluorescent lamps; luminaire data consisting of general, photometric, electrical and mechanical characteristics; illumination design including zonal-cavity calculations for industrial buildings, offices and schools; store lighting, exterior residential lighting; cost analysis to include lamp economics, lighting system ownership and operating costs.

Electrical Fundamentals EL 905
A.T.E.C. Program (Approved)

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: MATH 100.
Course Content: Basic electrical concepts; simple D.C. circuits, power magnetism, electro-magnetism, magnetic circuits; D.C. measuring instruments; A.C. measuring instruments; electrical measurements, induction, capacity, alternating current, resistance, impedance, power in A.C. circuits.

Electrical Construction — EL 907
Part I

Monday and Wednesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Grade 10 or the equivalent.
Course Content: Ohm's Law; series circuits, combination circuits; two-wire distribution; line loss, power, efficiency; wire calculations; batteries, magnetism, electro-magnetism, induction, three-wire distribution; Hydro Electric Power Commission Regulations; shop projects.

Electrical Construction — EL 908
Part II

Tuesday and Thursday, 7:00-10:00 p.m.
Case Loma Campus
60 hours
Fee: $65.00

Prerequisite: EL 907 or the equivalent.
Course Content: Electro-magnetism; induction; DC generators; generator set-up and operation; DC motor, motor operation and controls; Hydro-Electric Power Commission Regulations; shop projects.

Electrical Construction — EL 909
Part III

Tuesday and Thursday, 7:00-10:00 p.m.,
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: EL 908 or the equivalent.
Course Content: AC fundamentals, vectors, single-phase transformers, single-phase motors, three-phase motors, three-phase transformers, auto transformers, Hydro-Electric Power Commission Regulations, shop projects.

Industrial Electronic Controls EL 910
Part I

Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Fifth term apprentices, journeymen electricians, or equivalent.
Course Content: Basic principles, study of AC theory, vector analysis, introduction to electronics, types of electronic-tubes, amplifiers, tube circuitry, and applications, phantrons, thyratrons, solid state devices and shopwork.

Industrial Electronic Controls EL 911
Part II

Monday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: EL 910.
Course Content: Power supplies, principle of timers; welding timers; current control with gas tubes; solid state devices; thyratron contactors, ignitron contactors; phase shifting; welder heat control; resistance welders; sequence weld timers; shopwork.

Industrial Electronic Controls EL 912
Part III

Saturday, 6 hours
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: EL 911.
Course Content: Photoelectric relays, heat controls; light dimming controls; principle of speed and voltage regulators; speed regulators for small DC motors; voltage control for DC and AC generators; single phase and polyphase power rectifiers; oscillators; inverters; induction heaters; dielectric heaters; high speed light relays; register control; servomechanisms; shopwork.

Industrial Electronic Logic EL 913
Static — Part IV

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: EL 912.
Course Content: Transistor switching, trigger pulse, shaping circuits, time delay circuits, Flip-flops, Master-slave functions, truth tables, Binary number system, Boolean algebra mapping, NOR, NAND, and composite logic gates, comparators, adders, analogue and digital methods, storage, retrieval, volatile and non-volatile memory systems, routing switchers, power control applications, interfacing, black box concept, integrated circuits, printed wiring boards, analysis of current control and device circuitry.

Electrical Blueprint ELDR 612
Reading

Monday and Wednesday
7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Electrical Apprentice, Electrician, or anyone employed in the Electrical Construction and Maintenance Industry.
Course Content: Printing, architect's scale, residential drawings, construction drawings, architectural drawings, structural drawings, concrete drawings, mechanical drawings, specifications, electrical drawings, layout drawings, material take-off, material order, time sheets, inspection, as-built drawings, schematic drawings, and equipment take-off.

Logic ELTC 906

Thursday, 7:00-10:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: ELTC 904 or equivalent, background knowledge of transistor theory.
Course Content: Logic circuits; register circuits; Boolean algebra; arithmetic circuits; codes and error detection; A/D and D/A conversion; laboratories.
NOTE: This course is a prerequisite for ELTC 906A (Computer Systems) and ELTC 916 (Data Communications) to be offered in January 1977.

Video Tape Recorders ELTC 912
Theory And Maintenence

Tuesday, 7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Course Content: Theory of video tape recording principles; magnetic recording process; tape magnetization; single track, multi-track, vertical and slanted tracks; signal modulation and demodulation systems; pre-emphasis and de-emphasis requirements; FM signal differentiation; low pass filter; white clipper; limiter; d-c restoration; servo-operation; basic editing and colour signal recording principles.

Introductory ETV And ELTC 915
Broadcast Maintenence

Monday, 7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: Fundamental knowledge of electronics.
Course Content: Theory and techniques as applicable to closed television circuit operations found in broadcast studies, educational television, community cable television centers, and related fields; vu-meters, audio distribution system and amplifier testing; equalization, turntables, (T.T.), magnetic recording and playback systems; equipment evaluation, audio consoles, intercommunication and public address requirements; video distribution systems and amplifiers; monochrome and colour signal evaluation; video monitors; synchronization methods; switchers and effects generators; studio and telecine cameras; camera tubes; 16 mm telecine film projectors; basic test equipment and system evaluation; measurement techniques.

Microprocessors ELTC 917

Tuesday, 7:00-10:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Programming and use of popular microprocessors are studied in a laboratory setting; architectural comparisons are made in relation to suitability for special applications. A microprocessor will be available for personal use with the payment of an optional laboratory fee of $125.00
Course Content: Popular microprocessor architectures, programming techniques, interfacing using available support logic, microprocessor memories, applications and trends.

Electronic Fundamentals — Part I ELTC 900

Monday, 7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Course Content: Energy; electricity; resistors and conductors; cells and batteries; voltage; current and resistance; Ohm's law; electric power; D.C. circuits; Kirchoff's law; capacitors; electromagnets; inductors and induction; Lenz's law; A.C. source; vectors; reactance; impedance; resonance; A.C. power; electric meters; transformers, resonant circuits; A.C. circuits.

Electronic Fundamentals — Part II ELTC 901

Tuesday, 7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: Successful completion of ELTC 900.
Course Content: Transducers, vacuum tube operation; vacuum tube characteristics; basic power supplies; electronic meters; cathode ray tubes; oscilloscope; power transfer; impedance matching; atomic structure of semiconductors; diode junction; avalanche and Zener breakdown; junction transistors; transistor amplifiers, coupling methods, power amplifiers, transistor oscillators; semi-conductors data sheets.

Electronic Fundamentals — Part III (Radio) ELTC 902

Thursday, 7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: Successful completion of ELTC 901.
Course Content: Communications systems; amplitude modulation; frequency modulation; demodulation and detection; troubleshooting and maintenance; test equipment; troubleshooting radio receivers; servicing techniques; servicing automobile receivers; AM/FM receivers; radio receiver alignment; sound systems; record changers-pickups; tape recorders; RC circuits; LR circuits; blocking oscillators; multi-vibrators.

Electronic Fundamentals — Part IV (Television) ELTC 903

Thursday, 7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Course Content: Sawtooth generators; flip-flop; binary counters; decimal counters; clippers; limiters; shapers; triggering circuits; gating circuits; television system requirements; tuner circuits; VHF tuners; video OF section; video amplifiers; picture tubes; sound channels; sync signals, sync circuits and DC restorers; sweep oscillators; sweep amplifiers; high voltage suppliers; UHF tuners; antennas; transmission lines; component television receivers; servicing techniques.

Colour Television ELTC 909

Thursday, 7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: Sound knowledge of black and white television circuitry. A short qualifying test at the time of registration.
Course Content: Principles of the colour TV system; colour receiver circuits; RF and IF circuits, video, sync, voltage supply circuits; band pass amplifier, colour sync, colour killer circuits, colour demodulation, matrix section, colour picture tube and associated circuits, servicing the colour receiver, set up procedure, aligning the colour receiver, trouble shooting; current models of receivers.

Fashion Technology

Apparel Management

The following courses are offered to those people interested in obtaining a diploma in Apparel Management, or in upgrading their present employment. We suggest you call the Fashion Technology Division for information as to times and courses offered.

All part-time (extension) courses bearing code numbers in the one, two, three, or four hundred series carry credits that can be used towards obtaining a two-year or three-year diploma in specialized programs. Please contact the Dean or Chairman for details.

Apparel Construction DRES 141
(Dressmaking Elementary)

Nights to be decided
7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Course Content: Elementary dressmaking using commercial patterns; samples, measurements, relationship of pattern, style and fabric, laying out patterns; sewing techniques (hand and domestic machine).

Apparel Construction DRES 141A
(Dressmaking Elementary)

Saturday
Kensington Campus
60 hours
Fee: $65.00

Course Content: Same as DRES 141 with special application for Senior Citizens.
The student will provide own material.

Apparel Construction DRES 145
(Dressmaking Intermediate)

Tuesday, 7:00-10:00 p.m.
Kensington Campus
30 hours
Fee: $35.00

Prerequisite: DRES 141 or equivalent.
Course Content: Continuation of DRES 141 — the proper selection of style and pattern to suit the wearer and material; fashions and their changes; knits and stretch fabrics techniques; intimate wear and lingerie; special finishes.
Student to supply materials.

Apparel Pattern Drafting I PAT 141
(Elementary)

Nights to be decided
7:00-10:00 p.m.
60 hours
Kensington Campus
Fee: $65.00

Prerequisite: Knowledge of dressmaking.
Course Content: Elementary pattern design (Men's, women's and children's wear); drafting directly "on the flat" (i.e. on paper); in manufacturing sizes to a "price line".

Apparel Design I PAT 142
(Men's Pattern Design)

Nights to be decided
7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Course Content: Styling, line, proportion, research (drafting of men's patterns).
Students to supply own material.

Apparel Pattern Drafting II (Intermediate) PAT 143

Nights to be decided
7:00-10:00 p.m.
Kensington Campus
30 hours
Fee: $35.00

Prerequisite: PAT 141 or equivalent.
Course Content: Intermediate pattern drafting (women's and children's wear) embellishing PAT 141.

Fashion Illustration I (Elementary) (Apparel Design) PAT 144

Nights to be decided
7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Prerequisite: Grade 8 or equivalent and artistic aptitude.
Course Content: Elementary course in Fashion Art to show fashion, style design, fabric texture.
Student to supply own materials.

Modelling (Fashion) FASH 110

Tuesday, 7:00-10:00 p.m.
Kensington Campus
30 hours
Fee: $35.00

Course Content: Fashion runway modelling — fashion showing, self improvement.

Drapery (Slipcovers) FAB 252

Nights to be decided
7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Course content: How to measure and make drapes and slip covers.

Theory and Recognition of Furs (Introduction) FUR 543

Days only
Kensington Campus
60 hours
Fee: $65.00

Prerequisite: Instructor's evaluation or Grade 10.
Course Content: Recognition of wild and ranched furs. Continuous intake.

Fur Manufacturing Techniques (Elementary) FUR 244

Days only
Kensington Campus
60 hours
Fee: $65.00

Prerequisite: Some fur knowledge and Grade 10.
Course Content: Cutting, sewing, blocking and finishing. Continuous intake.

Fur and Leather Fashions FUR 545

Days only
Kensington Campus
60 hours
Fee: $65.00

Prerequisite: FUR 144 or experience.
Course Content: Drafting patterns and grading. Continuous intake.

Furniture Finishing FURN 103

Monday and Wednesday,
7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Course Content: Surface preparation and basic colour treatments including staining and glazing; hand and spray application of varnish, shellac and lacquer.
Students supply own material.

Furniture Upholstery I FURN 104

Monday and Wednesday,
7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Course Content: Stuffing and covering, measuring, cutting, fitting, stapling, etc.
Students supply own material.

Sewing Machine Operation SEW 141

Two afternoons or two evenings a week
Kensington Campus
120 hours
Fee: $125.00

Prerequisite: Instructor's evaluation.
Course Content: Single-needle lock stitch flat-bed machine; 240 hours Performance Objective Program leading to speed, stamina, rhythm in sewing on professional machine; use of steam iron on trolley; 120 hours first semester.

Serger Machine SEW 542

Afternoon or evening
Kensington Campus
30 hours
Fee: $35.00

Prerequisite: SEW 141.
Course Content: Special module (30 hours) for students reaching SEW 141/151 objectives in less than 240 hours. Also available for part-time students during regular classes.

Blind Stitch Machine SEW 543

Afternoon or evening
Kensington Campus
30 hours
Fee: $35.00

Prerequisite: SEW 141.
Course Content: Special module as for SEW 142.

Button-Hole and Button Sewer Machine SEW 544

Afternoon or evening
Kensington Campus
30 hours
Fee: $35.00

Prerequisite: SEW 142 or SEW 143.
Course Content: How to use button-hole and button sewer as used in Ontario Apparel plants.

Sewing Machine Operation II SEW 551

2 afternoons or 2 evenings a week
Kensington Campus
120 hours
Fee: $125.00

Prerequisite: SEW 141.
Course Content: As SEW 141, final 120 hours of Performance Objective Program for part-time students during regular classes.

Ladies' Hairdressing HAIR 900

Monday and Wednesday,
7:30-10:30 p.m.
Kensington Campus
60 hours
Fee: $100.00

Prerequisite: Ontario Certification of Qualification and currently employed.
Course Content: Review of basic techniques; advanced methods of scissor cutting, blow waving, ironing, back-combing and back-brushing techniques; handling long hair, hair pieces and current fashion trends.

Men's Hairstyling BARB 900

Wednesday, 7:30-10:30 p.m.
Kensington Campus
60 hours
Fee: $65.00

Prerequisite: Ontario Certificate of Qualification and currently employed.
Course Content: Practical haircutting, shampoos; discussions on styles, styling and blow waving, tinting, bleaching, processing, razor cutting, hair pieces.

Men's Clothing I FASH 904

Monday, 7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Prerequisite: Designed for those working in apparel stores. Interest is more important than extensive experience.
Course Content: Taping and measuring; figure description; proper writing up of orders, fitting and try-ons; some common alterations and markings for made-to-measure.

Tailoring I DRES 146

Monday and Wednesday,
7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Prerequisite: DRES 141 or sewing skills.
Course Content: Ladies' tailoring, sewing, cutting techniques; finishing coats and suits using commercial techniques. Some men's and children's tailoring.
Students supply their own material.

Elementary Weaving WEAV 101

Wednesday and Thursday
7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Course Content: Small hand looms basics.
Student supply own material.

Elementary Weaving WEAV 151

Wednesday and Thursday
7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Prerequisite: WEAV 101.
Course Content: Continuation of WEAV 101.
Students supply own materials.

Advanced Weaving WEAV 201

Wednesday and Thursday
7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Prerequisite: WEAV 151 or equivalent.
Course Content: Large hand looms; projects.
Students supply own material.

Advanced Weaving WEAV 251

Wednesday and Thursday
7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00

Prerequisite: WEAV 201.
Course Content: Continuation of WEAV 201.
Students supply own materials.

Macrame ART 801

Wednesday, 7:00-9:00 p.m.
Kensington Campus
20 hours
Fee: $25.00

Course Content: Basic concepts of macrame.
Students supply own materials.

Work Management I (Time Studies) AT 100

Kensington Campus
45 hours
Fee: $50.00

Prerequisite: Grade 12 mathematics; apparel plant experience or equivalent.
Course Content: Methods, time and motion studies with emphasis on sewing and cutting and work simplification.
Students supply own stop watches and boards.

Apparel Machine Technology II (Sewing Machine Repairs) AT 152

Kensington Campus
32 hours
Fee: $37.00
Material: $21.00

Prerequisite: Demonstrated mechanical aptitude.
Course Content: Some mechanics of sewing machines, history; justifying purchase, variations, efficient uses and common repairs (elementary).

Operator Training I AT 161

Kensington Campus
45 hours
Fee: $50.00

Course Content: Includes SEW 141, plus techniques for training production employees, single-needle sewing machine. Selection, orientation, evaluation of operators and cutters.

Operator Training II AT 162

Kensington Campus
45 hours
Fee: $50.00

Course Content: Applying production standards and establishing wage rates (hourly and piece work), work incentives, motivation etc.

Apparel Production Management I (Effective Supervision) AT 171

Kensington Campus
45 hours
Fee: $50.00
Materials: $5.00

Course Content: Human relations and communications. Supervision as practiced in the efficient apparel plant and workroom; division of work and work loads; scheduling etc.

Watchmaking WATCH 901

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00
Materials: $10.00

Prerequisite: Current employment in the Watchmaking industry. This is a long range program consisting of several units, each of which may take more than 60 hours to complete. The students are expected to re-enroll for several years. Practicing Watchmakers who wish to improve their knowledge in any given area may take up any one unit they desire. The beginners must progress in the order the units are organized.
Course Content: Lathe work, clock work, balance work, hairspring manipulations, jewelling techniques, watch overhaul and lubrication, watch adjustments automatic and calendar watches, part replacement and interchangeability, waterproofing watch cases.

Basic Clock Repairing WATCH 903

Tuesday, 7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00
Materials: $10.00

Course Content: Theory: Pendulums and balance wheels as frequently occuring; alarm, striking and chiming mechanism. Shop: replacing of mainsprings, staffs, suspension springs, fittings of bushings, hole closing, reaming and uprighting, pivoting, clock cleaning, setting up escapements.

There is a $5.00 additional fee in the jewellery courses for use of equipment.

Jewellery Introduction JWL 160

7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Current employment in the industry or hobbyist.
Course Content: Introduction to jewellery making; finishing, hard soldering, finishing and polishing of precious metals; elementary jewellery repairs, cuttlefish casting, centrifugal casting models for production methods, etc.
Students supply own material.

Gem-Setting JWL 162

Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: JWL 160.
Course Content: Follows JWL 160 to work in gem setting.

Jewellery Making (Silversmithing) JWL 164

Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Currently employed in the jewellery industry or hobbyists.
Course Content: Follows JWL 160 to work in silver.

Gemmology I GEM 167

Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: Applicant may be either employed in the jewellery industry or be interested in jewellery design as a hobby.
Course Content: Elementary gemmology; study of precious stones, cuts, shapes etc.

Jewellery Making (Enamelling) ENA 170

Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Enamelling; elementary theory and practice applying enamel to metal.
Students supply own material.

Jewellery Advanced JWL 260

Tuesday and Thursday, 7:00-10:00 p.m.
Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: JWL 160.
Course Content: Advanced Segment of JWL 160.
Students supply own material.

Jewellery Advanced JWL 260A

Casa Loma Campus
60 hours
Fee: $65.00

Prerequisite: JWL 160
Course Content: Jewellery making advanced segment (casting).
Students supply own materials.

Jewellery Making (Lapidary) JWL 903

Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Cutting gem material with diamond saw; grinding and lapping practice; sanding and polishing gem material; materials used for polishing and their uses; dropping procedure; orientation of gem stones, selecting rough materials; theory of facet cutting; comparative hardness of materials.

Jewellery Design DES 169

Casa Loma Campus
60 hours
Fee: $65.00

Course Content: Basic design; history of jewellery; sketching and drawing two and three dimensional designs.

Ceramics classes form every ten weeks. Sixty hour courses are run Monday and Wednesday, and Tuesday and Thursday, 9:00-12 noon, 1:00-4:00 p.m. and 7:00-10:00 p.m. Thirty hour courses are run Friday, 9:00-12 noon, 1:00-4:00 p.m. and 7:00-10:00 p.m., and Saturday, 9:00-12 noon, 1:00-4:00 p.m.

Cost of firing is included in the materials charge for all ceramics courses.

Basic Ceramics CER 900

Casa Loma Campus
30 hours
Fee: $35.00
Materials: $10.00

Course Content: Introduction to wheel techniques; hand building, glazing, decorating and kiln work.

Ceramics 1 CER 101

Casa Loma Campus
60 hours
Fee: $65.00
Materials: $20.00

Course Content: Wheel techniques, hand building, glazing, decorating and kiln work.

Ceramics 2 CER 151

Casa Loma Campus
60 hours
Fee: $65.00
Materials: $20.00

Prerequisite: CER 101 or equivalent.
Course Content: Advanced classes for CER 101.

Ceramics 3 CER 201

Casa Loma Campus
60 hours
Fee: $65.00
Materials: $20.00

Prerequisite: CER 151 or equivalent.
Course Content: Advanced classes for CER 151.

Ceramics 4 CER 251

Casa Loma Campus
60 hours
Fee: $65.00
Materials: $20.00

Prerequisite: CER 201 or equivalent.
Course Content: Advanced classes for CER 201.

FOOD TECHNOLOGY

Some of the courses do not indicate the day of the week. Verification of the day can be obtained by calling 967-1212. Local 613/689 after August 3, 1976.

Food Technology

Certificate Course in Haute Cuisine

This program is designed to meet the evergrowing demand for knowledge and practical experience in the creation of fine food and entertainment in the home. The entire course consists of 5 individual sections commencing with basic small quantity food; this will give the student the opportunity to apply the principles of cooking, using the raw materials with tested recipes under the guidance of skilled chefs. This section will be followed in sequence by basic baking, advance small quantity food, advance baking and appreciation of wines, spirits and liqueurs. Each student, on satisfactory completion of the individual sections, will recieve a certificate of competence and, on completion of all five sections, will be awarded a certificate in Haute Cuisine.

Haute Cuisine Program

Introduction applies to first five courses only

Basic Small Quantity Food FP 730

6:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00
Materials: $45.00

Course Content: This course is designed to introduce the basic principles of cooking as related to fine food, to take the raw products and create the basic requirements for classical dishes, sauteing, broiling and stewing, cooking lean and fat fish, seafoods, and the accompanying vegetables, salads, garnishes and dressings, employing the knowledge and expertise of chefs in the use of herbs, spices and wines.

Basic Baking BK 610

6:00-10:00 p.m.
Kensington Campus
40 hours
Fee: $45.00
Materials: $25.00

This course is designed to equip the student with a practical working knowledge of pastry doughs, choux paste, yeast dough and sponge goods, the use of icings, creams, puddings, custards and other desserts, fruits, tarts, pies and quick breads, the high ratio and angel cake mixes, simple decoration and presentation of birthday and other occasion cakes.

Advanced Small Quantity Food FP 731

6:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00
Materials: $60.00

Prerequisite: Basic Small Quantity Food. FP 730. This course will take the basic principles of cooking and apply them to the classical dishes of the countries in continental Europe, so that the student will be able to produce the French classics, the famed Italian pastas, the Spanish paellas, the Russian coulibiacs, the Scandinavian smorgasbords, the German sauer braten and beer soups, the shish kabobs of Turkey and Greece, the bouillabaisse of Marseilles, the Indian curries, Japanese suki yaki, the nasi goreng of Indonesia and a host of other famous dishes.

Advanced Baking BK 634

6:00-10:00 p.m.
Kensington Campus
40 hours
Fee: $45.00
Materials: $30.00

Prerequisite: Basic Baking. BK 610.
The course will take the basic knowledge of pastry and desserts and allow the development of these techniques to create the patisserie masterpieces, the flamboyant desserts, ice cream bombs, soufflés, petits fours, tortes, gateaux, and sugar creations with the decorative centre pieces, the true art of French pastries and their presentation.

Appreciation of Wines Spirits and Liqueurs F 807

7:00-10:00 p.m.
Kensington Campus
30 hours
Fee: $35.00
Materials: $45.00

Prerequisite: Over 18 years of age.
This course will be devoted to the knowledge of wines from the standpoint of types, vintage, prices, handling, storage, and correct usage in relation to the menu, the glassware, and the serving temperatures. Guest lecturers will deal with the evaluation by taste of the more distinctive wines.

Chinese Cuisine F 810

Wednesday 7:00-10:00 p.m.
Kensington Campus
30 hours
Fee: $35.00
Materials: $15.00

This course is designed to introduce the student to the basic principles of Chinese cooking. The course contains a series of lectures and demonstrations to familiarize the student with the use of ingredients, herbs, teas, wine and the planning of menus familiar to North America. Tasting of prepared dishes will be part of each demonstration lesson.

Advanced Wine Appreciation F 811

7:00-10:00 p.m.
Kensington Campus
30 hours
Fee: $35.00
Materials: $95.00

Prerequisite: Appreciation of Wines, Spirits & Liqueurs, F 807.
Course Content: This course has been designed to familiarize students, who already have a sense of wine appreciation with "Grand Crus" from French and German vinyards. The program will also include liqueurs, spirits, cordials, beers and ciders. Tasting and sampling will be part of the prescribed course.

Junior Gourmet Cooking F 815

Saturday 10:00 a.m. - 1:00 p.m.
Kensington Campus
30 hours
Fee: $35.00
Materials: $15.00

Prerequisites: 10 - 16 years of age and a desire to learn gourmet cooking.
Course Content: Students will engage in practical work to attain the skills required to do basic gourmet cooking. Areas covered will be — vegetable cooking, egg cookery, rice and pasta, salads, roasting, desserts and sandwiches.

Twentieth Century Cooking F 816

6:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00
Materials: $45.00

Prerequisites: A basic knowledge of cooking in order that the student can learn the techniques of preparing, freezing and re-heating of a large variety of food products.
Course Content: The students will begin the course by preparing, cooking and freezing small batches of soups, sauces, meat, fish, poultry, vegetable and pasta dishes, followed by the techniques required to defrost, re-heat and complement the dishes using wines and seasonings. The last 5 weeks will be devoted to the use of micro-wave cooking in the home.

Food Micro Biology BIO 200

Tuesday and Thursday
6:30-9:30 p.m.
Kensington Campus
180 hours
Fee: $185.00
Materials: $45.00

Prerequisites: Grade 12 Ontario Secondary School Diploma or equivalent. Subject to an interview, mature students over 19 years of age will be accepted, if they are employed in a technical capacity in the food industry.
Course Content: Isolation and identification of micro-organisms common to food; media preparation and sterilization; membrane filter applications; staining; environmental sampling; microbiological standards for foods; application of statistical sampling; the use of chemical & physical methods to prevent microbiological deterioration of food product quality; the role of micro-organisms in the processing and manufacture of food products; microbiological assays.
Although primarily a laboratory course, applicable theory will be presented in the form of lectures, reading assignments and group discussions.

Mixology BAR 503
(Cocktail Bartending)

Monday 7:00-10:00 p.m.
Kensington Campus
30 hours
Fee: $35.00
Materials: $25.00

Prerequisite: This course is designed to teach basic drink preparation for home use or as an introduction to the bartending profession. Using fully equipped, individual bars, students learn to prepare the 30 most popular shaken, stirred and built drinks.

Meat Trade Theory MC 613
Retail Meat Cutting

Tuesday 7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00
Materials: $5.00

Prerequisites: This course is designed for persons in junior positions in the retail trade and people interested in the skill of meat cutting.
Course Content: Lecture and demonstration: Cutting, grading and characteristics of beef, lamb, pork and veal carcasses, preparation of poultry, fish and shellfish for retail sale, displaying and merchandising of all types of meat products, special lectures on sanitation and refrigeration.

Pastry Craft BK 616

7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00
Materials: $15.00

This course is designed for those who wish basic knowledge of baking. Lectures, demonstrations and student participation are combined to convey both practical and theoretical aspects of the art of baking.
Course Content: Quick breads, pies and tarts, puddings, bread and rolls, sweet yeast products, puff pastries and pate a choux, icings and fillings, cakes and cookies including ready mixes and other convenience products.

Decorating Craft BK 639

Tuesday 7:00-10:00 p.m.
Kensington Campus
60 hours
Fee: $65.00
Materials: $15.00

This course is designed for those persons who wish to learn the art of cake decoration and design.
Course Content: Icing and coatings, royal icing, fondants, butter creams, couvertures, boiled icings and frostings, basic design, techniques of piping, decorating materials, methods, freehand geometric designs, stencils, runouts, prefabricated decorations, lettering, flowers, border designs, etc. Cakes for special occasions — techniques and methods.

Strictly for Entertainment F 808

7:00-10:00 p.m.
Kensington Campus
30 hours
Fee: $35.00
Materials: $15.00

Prerequisites: This course is designed for those homemakers having a basic knowledge of cooking but wishing to entertain at home with flair and imagination.

Course Content: A series of lectures and demonstrations. Although the meals prepared are not intended to represent economical fare for the family, the basic principles governing the selection, combination and cooking of food can be applied to everyday use. Each session will be devoted to a complete menu and students will be given the opportunity to taste each dish whenever possible. A selection of complementary wines will be discussed.

GRAPHIC ARTS

Graphic Arts

General Note:

Successful completion of three courses at successive levels in the same subject will merit a special subject certificate (e.g. completion of GR 105, GR 205 and GR 305 for a Certificate in Process Camera, or GR 115, GR 116 and GR 216 for a Certificate in Single Colour Offset Press). Credits may be accumulated towards a diploma for the related technician program where appropriate.

There are seven major subject areas:

Graphic Design
Signwriting
Visual Communications
Printing Technology
Screenprinting
Audio Visual
Woodcarving

	Sept/1976	Jan/1977	Feb/1977
GRAPHIC DESIGN			
GD 100	27th	31st	
GD 101	28th		8th
GD 201	28th		8th
GD 212	29th		9th
GD 205	29th		9th
WOODCARVING			
GD 804	27th		

Graphic Design

Still Life Drawing and Painting GD 100

Monday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: Interest in art.
Course Content: Fundamentals of still life rendering. The student may start with charcoal drawing of still life objects followed by monochrome renderings of the objects in paint; fundamentals of color and value of colors; render a still life in color.

Life Drawing GD 101

Tuesday, 6:30-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: Interest in art.
Course Content: This course is designed to improve the student's ability to draw the human form. Each student will be started at his/her own level from basic contour drawing concentrating on the positive and negative shapes, followed by 25 minute poses. Later the student will do full shaded drawings with the model holding a sustained pose for the lesson. Advanced students may undertake additional work.

Illustration GD 201

Tuesday, 6:30-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: Basic Art Training.
Course Content: Concepts in books, magazines, T.V. graphics, murals, etc.: applied art and personal picture making. The course will be taught at two levels if the teacher feels this is necessary.

Advertising Design GD 212

Wednesday, 6:30-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: Interest in Art.
Course Content: This course is designed to give the theories of commercial art, along with some practical work in advertising layout and graphic design, mechanical drawings, paste-up and color separation by amberlith overlays. The student will be given some experience in preparing mechanical camera-ready art work.

T.V. Graphics GD 205

Wednesday, 6:30-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00

Prerequisite: Basic Art Training.
Course Content: Learning to choose lettering for T.V. in relationship to background composition for T.V. Learning to design in a simple T.V. form, studio graphics and 35 mm. slides. Learning basic techniques in animation, conventional and computer form from storyboard, creative thinking and actual art.

Woodcarving GD 804

Monday, 7:00-10:00 p.m.
Casa Loma Campus
90 hours
Fee: $95.00

Course Content: Properties of wood, nature of woodcarving; principles of design as applied to the materials; selection of tools.
Demonstration of Techniques: Carving in round; relief, incised, pierced, decorative chip and gouge carving; construction arrangement of carved forms for decorative purposes; applied carving for functional objects; finishing techniques; inlay of metal in wood for jewellery and other objects.
Students must supply all materials for class.

Printing Technology

Printing Technology covers all aspects of pre-press preparatory work, press operation and post-press Binding and Finishing. George Brown College has the best equipped facilities in Ontario and offers training in the latest techniques by "hands-on" participatory courses.

	Sept. 1976	Oct. 1976	Nov. 1976	Dec. 1976	Jan. 1977	Feb. 1977	Mar. 1977	Apr. 1977
COMPOSITION								
GR 100	30th					3rd		
GR 101	25th & 27th							
GR 208	29th							
GR 202A	27th					7th		
GR 202B	25,28,30th					1,3,5th		
GR 302A	28,30th					1st & 3rd		
GR 302B	25th							
GR 322A	29th							
GR 322B	27th							
PHOTOMECHANICAL REPRODUCTION — STRIPPING AND PLATEMAKING								
GR 105	29th			1st		9th		6th
GR 205	27th					7th		
GR 305			29th					4th
GR 308		23rd				12th		
GR 110	28th			1st		9th		6th
GR 210	29th					9th		
GR 310				1st				6th
MACHINE PRINTING								
GR 114	30th							
GR 214	28th							
GR 215					25th			
GR 115	28th, 29th				19th			
GR 115A	27th				31st			
GR 116	28th				25th			
GR 216	30th				27th			
GR 217	28th				25th			
BINDERY								
GR 125A	1st				5th			
GR 125B	2nd				6th			
GR 225A	1st				5th			
GR 225B	2nd				6th			
GR 325A	1st				5th			
GR 325B	2nd				6th			

PRINTING TECHNOLOGY

Introduction to Typography GR 100

Thursday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $10.00

This course is intended for persons employed in copy preparation departments, design studios, and information offices. A workshop approach to the subject through a balanced program of lectures and practical work, it will provide the layman with a background to enable him/her to make some of the critical basic decisions in the design of printed communication. The emphasis throughout the course will be on workshop programs directed towards the student's realization that letter forms are design shapes as well as word patterns. The historical and technical aspect will be covered only in as much detail as an understanding of contemporary typography is required.
Course Content: A definition of typography, historical and technical development, relationship to other arts, basic principles of design, shape and space recognition, spacing, typography in ephemera, basic typographic theory, color theory as related to printed typographic material, translation of basic layouts to printed matter.

Hot Metal Composition GR 101

Monday, 6:00-10:00 p.m.
60 hours
Saturday, 8:00-12:00 noon
60 hours
St. James Campus
Fee: $65.00
Materials: $15.00

Prerequisite: Preference given to candidates employed in the graphic arts industry.
Course Content: Basic hand composition; California Job Case; the setting of several projects involving justification, tabular, thumbnail sketches and the setting of business cards, stationery, and advertisements.
Note: If there are only sufficient registrants for one class the Monday evening class only will run.

Photocomposition (Basic) GR 202A

Monday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $10.00

This course is intended to fulfill the need for training in fundamental typesetting and phototypesetting concepts before the candidate enters GR 202B Photocomposition (Operation). The course may also be of value ot those employed in typesetting related jobs.
Course Content: Typeface recognition, type size recognition, the printers' point system, the relative unit system, mark-up fundamentals, typographic style considerations, proofreading, a short history of phototypesetting, various kinds of computer typesetting systems in use and their applications. The course will be taught by workshop methods as far as possible — typing skill will be an asset.

Photocomposition (Operation GR 202B
AKI Keyboards Inputting to VIP)

Tuesday, 6:00-10:00 p.m.
Thursday, 6:00-10:00 p.m.
Saturday,
60 hours
St. James Campus
Fee: $65.00
Materials: $20.00

Prerequisite: Typing skill to a level of 45 words per minute on a five minute test and GR202A Photocomposition (Basic) or equivalent experience; or, permission may be granted by the instructor to those without prerequisites where employment as an operator is not the prime objective of the student (salesmen, proprietors, mark-up personnel, persons with general interest); however, no final grade will be issued in these cases. Preference in registration will be given to those seeking work in the skill.
Course Content: This course is an individual learning program in which students may progress at their own speeds. The course covers all the basic machine instructions on the VIP from straight text setting to complex tabular. Storing and formatting both on the keyboard unit and within the VIP memory is dealt with.

Photocomposition (Basic Maintenance — Mergenthaler VIP) GR 208

Wednesday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $20.00

Prerequisite: Employment in a typesetting related field, or permission of the instructor.
Course Content: Designed to teach basic maintenance on the Mergenthaler VIP. The content will cover optics cleaning and adjustments; reader maintenance; general mechanical and electro-mechanical servicing; filmstrip care; and other related matters. In addition, processing of job tapes and program tapes will be taught.

Paste Make-Up and Ruling GR 302A
(Also called Artwork or Mechanicals)

Tuesday, 6:00-10:00 p.m.
Thursday, 6:00-10:00 p.m.
60 hours
St. James Campus
Fee: $65.00
Materials: $15.00

Prerequisite: One year of typesetting experience, or permission of the instructor.
Course Content: The laying out of boards and the assembly of paper positives. The course covers a wide variety of projects ranging from simple one colour postcard to advanced camera-ready artwork using amberlith overlays for multi-colour work.
The student will produce paper positives using various darkroom techniques, he/she will also be taught the use of headlining machines — setting type by photocomposition methods. Hand ruling will be taught using technical pens to produce ruled forms.

Film Assembly GR 302B

Saturday, 8:00-12:00 noon
60 hours
St. James Campus
Fee: $65.00
Materials: $20.00

Prerequisites: One year of typesetting experience or the approval of the instructor.
Course Content: Some basic paste make-up techniques are taught at the beginning of this course (however, it should be noted that this is in no way a paste make-up course — see GR 302A). Included is an assessment of quality of reproductions; assembly of required tools and materials; hand ruling and the use of various drawing instruments. The correction of positive film with other photo products will be taught. A limited number of darkroom techniques will also be offered.

Cold Type Mark-Up GR 322A
(General)

Wednesday, 6:00-9:00 p.m.
St. James Campus
45 hours
Fee: $50.00

Prerequisite: Employment in typesetting related field; or, permission of the instructor.
Course Content: Mark-up techniques used in the field of commercial typesetting. The content will include identification of the most common typefaces used and the methods of determining choice of typeface and size within the kinds of work concerned. Tours of typesetting plants may be arranged. A series of progressive mark-up assignments will be required of the student.

Cold Type Mark-Up GR 322B
(Advanced VIP Course)

Monday, 6:00-10:00 p.m.
St. James Campus
45 hours
Fee: $50.00
Materials: $10.00

Prerequisites: Completion of GR 202B, with a grade of at least "B"; or, one year's experience operating a keyboard in-put to a Merganthaler VIP. Admission may be also granted at the instructor's discretion.
Course Content: Typeface Identification, factors underlying typeface choice, appropriate size selection, analysis of samples of typeset material, typographic style considerations. The student will plan and mark-up a series of progressively more complex pieces of raw copy and be required to typeset the same using the College's VIP phototypesetter.

Photomechanical GR 105
Reproduction — Basic
(Black and White Camera)

Wednesday and Thursday
6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $25.00

Prerequisites: Preference will be given to candidates employed in the graphic arts industry.
Course Content: Operation of process cameras, calibration of process cameras and darkroom equipment for line, fine-line and half-tone negatives; application of coloured filters and the use of panchromatic film; making photographic contact, duplicates, spreads and chokes; theory of photographic lenses, light sources, film emulsions and processing solutions.

Photomechanical GR 205
Reproduction — Advanced
(Black and White Camera)

Monday and Tuesday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $25.00

Prerequisite: Completion of GR 105 or equivalent industrial experience.
Course Content: Half-tone photography and machine processing; includes operation, maintenance and control of film processors, use of reflection and transmission densitometers; calibration of various types of contact screens to camera and processing conditions; making duo-tones and other techniques; introduction to colour separation procedures.

Photomechanical GR 305
Colour Reproduction (Offset)

Monday and Tuesday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $25.00

Prerequisites: Completion of GR 205 or equivalent experience.
Course Content: Designed for students with line and half-tone experience; covers direct and indirect colour separation procedures by various methods; colour correction by photographic masking; basic colour theory; making screened positives and contrast control using CC filters; includes the operation and control of film processors, densitometers, enlarger and related equipment.

Photomechanical GR 308
Colour Separation
(Electronic Scanner)

Saturday, 9:00-4:00
St. James Campus
60 hours
Fee: $65.00
Materials: $25.00

Prerequisites: Completion of GR 305/ GR 306 or equivalent trade knowledge.
Course Content: Principles of scanning, E & D curve and other sensitometer applications; gradation and color computer, screening, proofing, future trends.

Film Imposition and GR 110
Printing Surface Preparation
(Basic Stripping and Platemaking)

Wednesday and Thursday,
6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $25.00

Prerequisites: Preference will be given to candidates employed in the graphic arts industry.
Course Content: A basic course for black and white and line colour stripping. The course introduces job planning and layout of flats containing negatives, half-tone negatives, line colour negatives and duo-tones. Imposition is included with the preparation of folded dummies and layout sheets for various types of bookwork. Darkroom techniques for making photographic contact film and the exposing and development of presensitized offset plates are part of this course.

Film Imposition and GR 210
Printing Plate Surface Preparation
(Advanced Stripping)

Wednesday and Thursday
6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $25.00

Prerequisite: Completion of GR 110 or equivalent experience.
Course Content: Advanced techniques in black and white, line colour and four colour process stripping; contact work and making spreads and chokes, step and repeat methods and an introduction to the programming and operation of a photo-composing machine.

Film Imposition and Printing GR 310
Surface Preparation
(Colour Stripping and Platemaking)

Wednesday and Thursday
6:00-10:00 p.m.
60 hours
St. James Campus
Fee: $65.00
Materials: $25.00

Prerequisites: Completion of GR 210 or equivalent experience.
Course Content: Four colour process stripping procedures including the preparation of flats containing chokes and spreads, fake colour and colour separation; colour charts are prepared by the student incorporating the various screen angles and tints. Further experience will be obtained in manual step and repeat methods and machine photo composing.

Machine Printing GR 114
(Letterpress)

Thursday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $15.00

Course Content: Fundamentals of Letterpress printing, Heidelberg platen and cylinder operation, lock-up, feeding, makeready and two colour projects.

Machine Printing GR 214
(Flexography)

Tuesday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $15.00

Prerequisites: Experienced personnel presently employed in pressroom work. This course is designed to acquaint students with the principles of roll feed printing equipment.
Course Content: Fundamentals of flexographic printing process, rolls, inks, tension controls, register, electrical controls, oven dryer, rewind, plate mounting.

Machine Printing GR 215
(Rotogravure)

Thursday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $15.00

Prerequisites: Experienced personnel presently employed in pressroom work. This course is designed to acquaint students with the principles of roll feed printing equipment.
Course Content: Fundamentals of rotogravure printing process, rolls, inks, web tension controls, doctor blades, register, electrical controls, oven dryer, rewind.

Machine Printing GR 115
Multilith (Basic)

Tuesday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $15.00

Prerequisites: Preference will be given to the candidates who have some offset duplicator knowledge.
Course Content: Fundamentals of offset lithography, feeding, dampening systems, ink control and running of one colour and two colour projects. This program leads to GR 115A or GR 116.

Machine Printing GR 115A
Multilith (Advanced)

Monday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $15.00

Prerequisites: Completion of GR 115 or a working knowledge of 1250 Multiliths.
Course Content: Advanced course in offset lithography covering feeding, dampening systems (both conventional and alcohol), colour control, two and multi colour projects. This program leads to GR 116.

Machine Printing GR 116
Single Colour Offset Press (Basic)

Tuesday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $25.00

Prerequisite: Completion of GR 115 or equivalent knowledge of printing and printing machinery.
Course Content: Offset lithography on single color, Heidelberg, Harris and Miehle presses (Basic). Good housekeeping and safety. Lubrication, measuring instruments and devices for pressmen. Cylinder arrangements, dampening systems both alcohol and conventional, inking and register systems. Plate, paper and ink as related to the pressman. Successful operation of a single colour press.

Machine Printing GR 216
Single Color Offset Press (Intermediate)

Thursday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $25.00

Prerequisites: Completion of GR 116 or the equivalent knowledge of offset lithography.
Course Content: Colour matching. Projects run during this course will include one colour, multi colour and process work.

Machine Printing GR 217
Two Colour (Offset Press)

Tuesday, 6:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $25.00

Prerequisite: Candidates presently running single colour presses or having completed GR 216.
Course Content: Practical application of two colour offset printing, alcohol dampening systems, register, cylinder arrangements, application of pH, chemistry of paper and ink, multi colour and process colour jobs and quality control on press runs.

Bindery GR 125
GR 225
GR 325
St. James Campus
60 hours
Fee: $65.00
Men — Monday or Tuesday or Thursday as required 6:00-10:00 p.m.
Women — Wednesday 6:00-10:00 p.m.

Prerequisite: Elementary Mathematics.
Course Content: Use of a selection of the following equipment with an aim of giving the student a thorough understanding of the equipment.
42" Guillotine — Seybold Citation Autospacer, 12 Channel.
26x40 Baum folder, Model 433, Mark II, Dial-O-Matic Feed.
17x22 Baum Folder, Pile Feed.
Muller Automatic Stitcher, one automatic and two hand feed stations.
Christensen Gang Stitcher.
Bostitch No. 19E Stitcher.
Muller Gathering Machine, Type 201.
Muller Tony 5 Ring-to-Binder.
Smyth No. 12 Book Sewing Machines.
Smyth No. 24 Casing-In Machine.
Stamping Press.
Nygren-Dahly Rotary Perforator.
Challenge Paper Drill.
Singer Sewer — side sewing.
Cohasset Tipper.
Cerlox, table-top combo.
Book Back Stripper, table-top model.
Schaefer table-top Gluer.
Casemaking Gauge.
Hickock Standing Press.
Hand Sewing Frames.

Because each major machine requires nearly 60 hours of instruction, the course certificates are sub-divided into the following categories. Minor skills and machines are taught as supplements in each category.

GR 125A	GR 225A	GR 325A
GR 125B	GR 225B	GR 325B

Courses start in September 1 (women) and September 2 (men), 1976. Also January 5 (women) and January 6 (men), 1977.

Screen Printing & Signwriting Courses

	Sept/1976	Feb/1977	March/1977
SP 900	27th	28th	
SP 901	29th		2nd
SIGN 900	28th		

Screen Process Printing SP 901
(Basic)

Wednesday, 7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $15.00

Course Content: Designed for persons not in the industry, but who wish to attain skills in basic stencil cutting, screen making and printing.

Screen Process Printing SP 900
(Advanced)

Monday, 7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $15.00

Designed for persons currently employed in the field who wish to upgrade their skills in photomechanical reproduction.
Course Content: Operation of process camera, line and halftone film-making, film imposition, preparation of indirect and direct photo stencils.

Signwriting SIGN 900

Tuesday, 7:00-10:00 p.m.
St. James Campus
60 hours
Fee: $65.00
Materials: $15.00

Prerequisites: Designed to give the fundamentals of general signwriting, showcard writing, banners, posters and an introducton to screen process printing.
Course Content: Basic pen and brush lettering, type faces, colour and layout theory and practice, materials, basic screen process printing.

Visual Communications Courses

These courses are designed for people already working in some facet of the expanding audio visual field. Each course provides extensive practical experience, coupled with sufficient theory, to give the student a good understanding of the subject studied.

The number of students accepted is limited to fifteen in each class, and all students will be requested to attend for an interview before enrollment.

A detailed synopsis for each of the following courses is available upon request.

	Oct./1976	Jan/1977	April/1977
AV 920	4th		4th
AV 922	5th		5th
AV 923	4th		
AV 924		10th	
AV 925		11th	
AV 926		10th	

Basic Photo-Technology AV 920

Monday and Thursday,
6:00-9:00 p.m.
Casa Loma Campus
60 hours
Fee: $90.00

Basic Audio Production Techniques AV 923

Monday and Wednesday
6:00-9:00 p.m.
St. James Campus
60 hours
Fee: $90.00

Cinematology AV 925

Tuesday and Thursday
6:00-9:00 p.m.
St. James Campus
60 hours
Fee: $135.00

Prerequisite: AV 922 or similar.
Enrollment limited to 10.

Basic Cinematography AV 922

Tuesday and Thursday
6:00-9:00 p.m.
St. James Campus
60 hours
Fee: $90.00

Television Techniques AV 924

Monday and Wednesday
6:00-9:00 p.m.
St. James Campus
60 hours
Fee: $90.00

Audio Production Techniques AV 926

Monday and Wednesday
6:00-9:00 p.m.
St. James Campus
60 hours
Fee: $135.00

Prerequisite: AV 923 or similar.
Enrollment limited to 10.

Audio Visual Extension Courses

The following courses offer a "hands on" approach to each of the subjects indicated, thus providing practical experience with the minimum of theory.

No interview is required, but students may discuss their requirements with the Instructor, before enrolling. Synopses of the courses are available upon request.

The course Introduction to Photography is offered on Tuesdays or Wednesdays, several times each year, to meet student demand. Early registration is advised.

	1st class	2nd class	1st class	2nd class	1st class	2nd class
	Oct./1976		Jan/1977		April/1977	
AV 904	5th • 6th		11th • 12th		5th • 6th	

Introduction to Photography AV 904

Tuesday or Wednesday
6:30-9:30 p.m.
Casa Loma Campus
30 hours
Fee: $45.00

The fee includes all materials that may be used during the course.

LANGUAGE TRAINING

Language Training

Intermediate English Conversation and Writing LT 814

Monday and Wednesday, or Tuesday and Thursday 7:00-9:00 p.m. College Campus 60 hours Fee: $65.00

Course Content: This is a course for second language learners who already know some English. The course will include work in the following areas: Speaking, Reading, Writing, Grammar (the structure of English), Listening comprehension. There will be some work in our language laboratory to improve stress and intonation. Students who successfully complete this Intermediate Course will qualify for the Advanced Course in English offered at College Campus.

Advanced English Reading Conversation For New Canadians LT 803

Monday and Wednesday or Tuesday and Thursday, 7:00-9:00 p.m., 9:00 to 11:00 a.m. Daily College Campus 60 hours Fee: $65.00

Course Content: For students who have already learned to speak and write basic English; includes vocabulary development, reading comprehension, developing conversational skills, business letters and report writing.

Speaking Canadian French (Basic) LT 804A

Tuesday and Thursday, 7:30-9:30 p.m. College Campus 60 hours Fee: $65.00

Speaking Canadian French (Intermediate) LT 804B

Tuesday and Thursday, 7:30-9:30 p.m. College Campus 60 hours Fee: $65.00

Speaking Canadian French (Advanced) LT 804C

Tuesday and Thursday, 7:30-9:30 p.m. College Campus 60 hours Fee: $65.00

Course Content: Acquisition of the distinctive Canadian features of French within general language development appropriate to the individual's competence; language is presented in relevant French-Canadian socio-cultural context.

Chinese Language and Heritage LT 805

Monday and Wednesday, 7:30 to 9:30 p.m. College Campus 60 hours Fee: $65.00

Course Content: Offers instruction in Mandarin, but Cantonese will also be offered if there is sufficient demand; introductory oral practice of the language in historical and contemporary cultural contexts; culture and values of the Chinese people in Canada. Only brief reference is made to the writing system of the language.

Italian Language and Heritage (Basic) LT 806A

Tuesday and Thursday, 7:30-9:30 p.m. College Campus 60 hours Fee: $65.00

Italian Language and **Heritage (Intermediate)** LT 806B

Wednesday, 7:00-10:00 p.m. College Campus 60 hours Fee: $65.00

Italian Language and Heritage (Advanced) LT 806C

Monday, 7:00-10:00 p.m.
College Campus
60 hours
Fee: $65.00

Course Content: Develop language skills in contexts of contemporary Italian values and practices, especially those features of Italian life as they are involved in an urban Canadian society; situational relevance of the course should make it helpful not only to the general public but especially to those involved professionally with the largest ethnic group in our city.

Spanish Language and Heritage (Basic) LT 808A

Monday and Wednesday, 7:30-9:30 p.m.
College Campus
60 hours
Fee: $65.00

Spanish Language and Heritage (Intermediate) LT 808B

Monday and Wednesday, 7:30-9:30 p.m.
College Campus
60 hours
Fee: $65.00

Spanish Language and Heritage (Advanced) LT 808C

Monday and Wednesday, 7:30-9:30 p.m.
College Campus
60 hours
Fee: $65.00

Course Content: Development of facility in both the speaking and the writing of the language; language instruction will be given in contexts that reflect the most notable features of Spanish Culture, particularly the culture of the Spanish-speaking countries of North and South America.

Spanish For Travellers LT 816

Tuesday and Thursday
7:30-9:30 p.m.
College Campus
60 hours
Fee: $65.00

Course Content: This is the Spanish of the sunny countries and the course often culminates in a charter trip to one of these. The emphasis therefore, is on the practical side with students looking forward to visiting a beautiful country and to using Spanish.

Greek Language and Heritage (Intermediate) LT 811B

Monday and Wednesday
7:30-9:30 p.m.
College Campus
60 hours
Fee: $65.00

Course Content: This course develops facility in speaking and writing the language and will be given in contexts reflecting the most notable contemporary features of Greek culture.

Interpreting For Medical and Legal Services

Tuesday and Thursday
7:30-9:30 p.m.
College campus
150 hours
Fee: $155.00

With Toronto's large and varied ethnic population, the importance of accurate communication in all matters of health and welfare and the need for qualified and effective interpreters has been well established.
George Brown's eight-month extension course in interpreting for Medical and Legal Services is designed to help fill this need. Graduates acquire oral and written bilingual competence; knowledge of policies, procedures and resources in the medical and legal services fields; and thorough grounding in standards of ethical and professional practice.
Candidates for admission to this course must be fluent in English and one of the following languages; Chinese, Greek, Italian, Portuguese, Spanish. Each applicant is tested and interviewed in English and the language in which he or she wishes to interpret. The applicant must be both aware of and sensitive to the social and cultural disposition of the foreign language group concerned. However, the foreign language does not have to be the applicant's first language.

A Practical Course in Teaching English As A Second Language To Adults LT 912

Monday and Wednesday
7:15-9:15 p.m.
College Campus
130 hours
Fee: $135.00

Prerequisites: Applicants should be native speakers of English with demonstrable expertise in the Canadian dialect. An exception could be made if a non-native speaker were to have equivalent fluency.
Course Content: The course offers the person inexperienced in teaching ESL a sound theoretical and practical foundation in the art. It offers the experienced ESL teacher a comprehensive study of modern theory and methodology. Subjects include phonology and grammar, English structure, inter-cultural studies, teaching aids, language labs, material development and evaluation and 30 hours of practical experience in the classroom. Enroiment is limited. To obtain an application form please phone 967-1212 Ext. 328 or 307.

THEATRE ARTS MUSIC & DANCE

Theatre Arts, Music and Dance

Theatre Arts

The Part-Time (Extension) courses described below are offered by the College in response to the widespread desire and need of people for participation in the dynamic and flourishing theatrical activities of Toronto. The courses provide the opportunity for serious study as well as for self-development and enjoyment.

Special Note

The course information given herein is the basic description.

The precise details of days-of-the-week, hours of the day, location, starting date, registration, etc. will be prepared in advance before the commencement of each term and an information flyer will be available in response to all enquiries.

For this, and other information, PLEASE TELEPHONE the College during normal office hours:
Coordinator of Theatre Arts and Dance
967-1212, Local 334.

Acting for Beginners THEA 900

10 weeks
50 hours
Fee: $55.00

Acting - Intermediate Level THEA 901

10 weeks
50 hours
Fee: $55.00

Prerequisite: Successful completion of THEA 900 or equivalent training or experience.
THEA 900 and THEA 901 are intensive activity courses providing practical exploration and development of the actor's art through improvisation and physical, vocal and mental techniques. Contact with professional teachers and coaches will focus on contemporary and traditional techniques found in the new wave of Canadian Theatre and Playwriting.

Practical Playwriting (Workshop) THEA 909

10 weeks
30 hours
Fee: $35.00

This course is run by the dramaturgy department of the Factory Theatre Lab, known throughout Canada for its work in developing Canadian Plays, and involves all aspects of playwriting for the professional theatre. Working with professional actors and directors, the student will be helped towards developing the script to a performance vehicle.

Acting and the Speaker (Basic) THEA 923A

10 weeks
25 hours
Fee: $55.00

Acting and the Speaker (Advanced) THEA 923B

10 weeks
25 hours
Fee: $55.00

These courses are designed to assist professional, non-professional and student actors, radio and TV broadcasters and performers, teachers, lawyers, public speakers, politicians and others who wish to improve their communication skills before audiences, in social and business groups and in their person-to-person relationshps.

Practical Theatre THEA 924

50 hours
Fee: $55.00

Involves project development and practical experience with a professional, performing company. Previous courses or acceptable experience are prerequisites.

Musical Comedy (Beginner Level) THEA 927

8 weeks
40 hours
Fee: $80.00

This course is designed for professionals, and others who have previous training and experiences in Acting or Dancing or Singing and wish to develop and further skills and artistry towards performance capability in musical comedy or small stage variety shows.

Musical Comedy (Advanced Level) THEA 927A

8 weeks
40 hours
Fee: $80.00

Includes refinement of skills, singing in harmony, techniques of concentration, memorizing, preparation for auditions.

Stage Management THEA 928

8 weeks
48 hours
Fee: $55.00

An Intensive workshop course for professionals, semi-professionals and others who wish to develop the skills, artistry and techniques of stage management in a professional setting.

Drama, Movement and Communication Part I THEA 930A

10 weeks
50 hours
Fee: $75.00

Drama, Movement and Communication Part II THEA 930B

10 weeks
50 hours
Fee: $75.00

Muscular function of the body in movement growth and development: movement in traditional and current modes of dance for artistic expression and communication: choreography and improvisation: role playing and simulation: training and teaching techniques in use of the body for dramatic and artistic presentation.
These two courses are a sequence and have been approved by the Certification Council of OSSTF as a FULL CREDIT approved related course for TEACHERS upgrading their qualifications on the Theatre and Communications Arts Chart No. 13 of OSSTF Certification.

Dance Courses

The following dance courses provide the opportunity for serious study of the current modes of the Dance as well as for enjoyment and self-development. Instruction is given by experienced, professional artists in unsurpassed studio facilities.

Dance Fundamentals THEA 905A

10 weeks
60 hours
Fee: $50.00

This course is designed for beginners and for those wishing to participate in meaningful exercise for personal enjoyment.

Modern Jazz Dance THEA 905E

10 weeks
60 hours
Fee: $50.00

Modern Jazz Dance instruction is given at beginner and Intermediate levels.

Lois Smith School of Dance

Director: Lois Smith

The Inclusion of The Lois Smith School of Dance as a program of the George Brown College ensures the continuation of the artistic policy and high standards of technical training that have given the school a foremost position and reputation across Canada.

The curriculum of all courses is designed for progression over a period of 39 weeks, which is divided into three terms of 13 weeks duration. A summer school is also offered during July and August where students may attend classes every day.

Registration commences Monday, August 23. Entrance auditions take place September 7 to 10 and classes start Monday, September 13.

Program — Junior School

The Junior School provides for two levels of creative movement as a preparation for ballet. At age 8 years they begin training in a carefully graded system of six levels of ballet. At the appropriate time they are introduced to National dancing and Pointe work.

Admission requirements: To commence classes in September, 1976, students must be not less than six years of age on or before December 31, 1976. If they have had previous training a grading audition will be required.

Senior School

The Senior School provides training from Elementary to Advanced levels in ballet, pointe, modern, character and Benesh dance notation as well as providing performing experience.

Admission requirements: Completion of the Junior School program, or by audition.

The **Pre-professional Cour**se is part of the Senior School and is for the advanced students who are able to spend most of the day in training. It is an intensive course of approximately 22 hours each week and is designed for students intent on dancing professionally. Admission is by audition only. Graduates may be eligible to join DANCESMITHS, an apprentice performing group sponsored by The Lois Smith Dance Foundation.

Non-professional school: A specially designed program for adults and non-professionals who wish to combine meaningful exercise with a deeper understanding of the technical aspects of dance. Instruction is offered in ballet, jazz, modern and pointe work and classes are graded from beginner to advanced levels.

For information on faculty members, audition dates, class schedules and fees please contact:

The Lois Smith School of Dance.
81A Front Street East
Toronto, Ontario M5E 1B8
Tel: (416) 363-9945

Music Courses

The Director of the Orchestral Program is the distinguished Dr. Boyd Neel.

The faculty is composed of some of Canada's most accomplished instrumentalists who have demonstrated ability to achieve exceptional results with students at all levels.

The courses are designed to complement existing programs at Secondary and Post-Secondary levels. Emphasis is on training students to perform together while receiving individual assistance.

Ensembles include a training orchestra, chamber orchestra, and a full range of wood-wind, string, brass and vocal ensembles.

All courses are offered in FALL, WINTER and SPRING terms. The SUMMER term takes the form of a specially designed SUMMER SCHOOL OF MUSIC, normally outside Toronto.

Instrumental Group Instruction MU 944

Monday
10 weeks
15 hours
Fee: $45.00

Four to six students studying the same instrument will receive instruction as a group.

Ensemble Course— woodwinds, strings, brass and keyboard MU 929

Tuesday
10 weeks
15 hours
Fee: $45.00

Participation and coaching in ensembles composed of various combinations of woodwinds, strings, brass and keyboard.

Music Theory MU 940

Wednesday
10 weeks
20 hours
Fee: $60.00

Students having basic music-reading skills will study the rudiments of music theory. This course will include ear-training and keyboard harmony where applicable.

Harmony MU 941

Thursday
10 weeks
20 hours
Fee: $60.00

Students having completed MU 940 or equivalent, will study instrumental and vocal 4-part writing, voice leading, cadences, with a significant portion of eartraining.

Orchestration and Arranging MU 942

Friday
10 weeks
20 hours
Fee: $60.00

Students having completed MU 941, or equivalent will study the techniques of orchestration and arranging for various instrumental and vocal ensembles.

Contemporary Music

The contemporary music courses are open to all serious music students of all levels (beginners to professionals). Courses are available in all popular styles — folk, jazz, rock. The Contemporary Music courses are directed by Paul Hoffert, the Jazz Courses by Fred Stone. This group of courses is available FALL, WINTER and SPRING terms.

Techniques and Improvisation CMU 902

Saturday
10 weeks
15 hours
Fee: $60.00

Improvisation and Jazz techniques in the development of contemporary musicians.
Prerequisite: Basic instrumental competence in guitar, piano, brass or reed.

Contemporary Music Theory CMU 903

Sunday
10 weeks
15 hours
Fee: $60.00

Usage of chord symbols, notation, blues progressions and rhythm sections.
Prerequisite: Basic Instrumental competence.

Electronic Music CMU 904

Monday
10 weeks
20 hours
Fee: $75.00

Theoretical and practical application of electronic amplification in contemporary music.
Prerequisite: Basic instrumental competence in keyboard.

Contemporary Song-Writing CMU 905

Tuesday
10 weeks
15 hours
Fee: $60.00

Song-writing techniques of contemporary music composers.
Prerequisite: Basic competence in contemporary instrumental music.

History and Development of Jazz CMU 906

Wednesday
10 weeks
15 hours
Fee: $25.00

Historical background and development of Jazz. No prerequisite.

Orchestration of Contemporary Music CMU 907

Thursday
10 weeks
15 hours
Fee: $60.00

Study of various instrumental textures, stylistic use of combination in contemporary music.
Prerequisite: Basic instrumental competence.

Music Appreciation CMU 908

Friday
10 weeks
15 hours
Fee: $25.00

Study of contemporary music styles, composers and musicians — ragtime, rock, jazz, popular, folk, country, blues, ethnic, No prerequisite.

Contemporary Musicianship CMU 909

Saturday
10 weeks
15 hours
Fee: $60.00

Sight reading, notation, rhythmic structures, melody, harmony, transposition.
Prerequisite: Basic instrumental competence.

Professional Workshops CMU 910

Sunday
10 weeks
15 hours
Fee: $25.00

Business aspects, managers, agents, contracts, publishers, composers rights, unions, promotion and P.R., road-crews, etc.

Contemporary Ensemble CMU 911

Monday
10 weeks
15 hours
Fee: $60.00

Participation in contemporary ensembles — rock, jazz, popular, folk, country, stage band.
Prerequisite: Basic instrumental competence.

Orchestral Courses

The courses in this section are under the direction of Dr. Boyd Neel and staff. Acceptance in these courses is subject to audition.

By arrangement with the Faculty of Music, University of Toronto, eligible students in the orchestral courses are welcome to rehearse with the Repertory Orchestra on Fridays from 4:00 to 6:00 p.m. in Room 119, Edward Johnson Building.

For those eligible students who are unable to rehearse with the Repertory Orchestra, arrangements have been made for them to rehearse with the Mississauga Symphony Orchestra at Erindale College, 8:00 to 10:00 p.m. Tuesday evening. Please enquire for transportation information.

Orchestral MU 938

Tuesday and Friday
10 weeks
20 hours
Fee: $25.00

Students having suitable instrumental competence will receive 20 hours of instructional participation with the concert orchestra. A chamber orchestra and/or large wind ensemble will be formed to accommodate students not eligible for the concert orchestras when sufficient students are enrolled.

Conducting MU 939

10 weeks
30 hours
Fee: $90.00

Students with suitable musical background will receive instruction on theory, practise techniques and basic patterns related to orchestral conducting.

Flemenco Guitar — Group Instruction MU 948

Wednesday
10 weeks
15 hours
Fee: $60.00

4-6 Students per lesson — basics of Flemenco guitar technique including instruction in 3 forms.
Prerequisite: Ability to read the natural notes below the 5th fret, and to read simple rhythms. Acceptance by audition.

Popular Keyboard

The following courses are designed for those who wish to be able to play popular music on the piano. Students learn on pianos specially designed for group instruction.

Popular Keyboard (Beginning Basic) MU 910

Tuesday
10 weeks
20 hours
Fee: $60.00

Keys, major scale, treble and bass clefts, flats, sharps, triads, note values, counting, rhythm.

Popular Keyboard (Intermediate) MU 911

Tuesday
10 weeks
20 hours
Fee: $60.00

Continuation from MU 910: chord variations, key signatures, inversions, minor scales, rhythm, accompaniment.

Popular Keyboard (Advanced) MU 912

Thursday
10 weeks
20 hours
Fee: $60.00

Continuation from MU911: chord inversions, ninth chord structures and voicings, full right hand, transposing, advanced accompaniment techniques.

Index

Accounting 33
Accounting, General 44
Acting for Beginners 85
Acting — Intermediate Level 85
Acting and the Speaker 85, 86
Activation 50
Activities with Children 47
Advanced Baking 66
Advanced Coatings Technology 10
Advanced English Reading Conversation for New Canadians 81
Advanced Programming 37
Advanced Records Management 36
Advanced Small Quantity Food 63
Advanced Weaving 62
Advanced Wine Appreciation 66
Advertising Design 70
Air Conditioning Design 20, 21
Air Conditioning Residential and Small Commercial 19
Apparel Construction 59
Apparel Design 59
Apparel Machine Technology 62
Apparel Pattern Drafting 59, 60
Apparel Production Management 62
Appliance Servicing 20
Applied Computer Programming 9
Applied Underwater Science 23
Appreciation of Wines, Spirits and Liqueurs 66
Architectural Drafting 18
Astrology 11
Audio Production Techniques 78
Auditing and Taxation 34
Automobile 39

Baking 65, 66
Bartending, Cocktail 67
Basic Audio Production Techniques 78
Basic Ceramics 64
Basic Clock Repairing 63
Basic Cinematography 76
Basic Coatings Technology 11
Basic Photo-Technology 78
Basic Small Quantity Food 65
Basic Typewriting — Lumisonic 43
Bindery 76
Biology 6

Blind Stitch Machine 61
Blueprint Reading for Construction Trades 18
Blueprint Reading, Electrical 57
Blueprint Reading and Estimating 19
Blueprint Reading for Ironworkers 15
Blueprint Reading for Machine Trades 14
Blueprint Reading for Millwrights 15
Blueprint Reading for the Welding Trade 14
Bodily Injury Claims 41
Bookkeeping 34, 44
Bricklaying 13
Burglary and Fidelity 39
Business Interruption 40
Business Law 10
Business Management 34
Button-hole and Button-sewer Machine 61

Cabinet-Making 13
Canadian French, Speaking 81
Caring for the Disturbed Child 47, 48
Carpentry 13
Casualty Covers 39
Ceramics 64
Chemistry 6
Chemistry (General) 7
Childhood Psychopathology 48
Children, Activities with 47
Chinese Cuisine 66
Chinese Language and Heritage 81
Cinematography, Basic 78
Cinematology 78
Clock Repairing, Basic 63
Coatings Technology 10, 11
Cobol 37
Cold Type Mark-Up 73, 74
Colour Television 58
Commercial and Industrial Heating Equipment 22
Communication 51
Community Practice 50
Computer Programming, Applied 9
Conducting 91
Construction Law 7
Construction Methods and Materials 19
Contemporary Ensemble 90
Contemporary Music, Orchestration of 90
Contemporary Music Theory 90
Contemporary Musicianship 90
Contemporary Song-writing 90
Cooking, Junior Gourmet 66
Cooking, Twentieth Century 66
Cost Accounting 33

Counselling, Practice and Method of 47, 48
Court Procedures 41
Creative Expression in Childhood 49

Dance Fundamentals 87
Data Processing, Introduction to 36
Decorating Craft 67
Dictaphone 42
Die Design 17
Disturbed Child, Caring for the 47, 48
Drafting, Architectural 18
Drafting (Basic), Electrical 55
Drafting, Process Piping 16
Drama, Movement and Communication 86
Drapery (Slipcovers) 60
Dressmaking 59

Economics 7, 10
Electrical Apprentice Review 55
Electrical Blueprint Reading 57
Electrical Construction 56
Electrical Drafting (Basic) A.T.E.C. 55
Electrical Fundamentals A.T.E.C. 56
Electronic Controls, Industrial 56
Electronic Fundamentals 58
Electronic Logic Static — Part IV, Industrial 55
Electronic Music 90
Elementary Weaving 61, 62
English I 7
English II 7
English and the Business World 10
English Conversation and Writing, Intermediate 81
English for New Canadians 9
English Reading Conversation for New Canadians, Advanced 81
English Technical 8
English Upgrading 5
Ensemble, Contemporary 90
Ensemble Course — woodwinds, strings, brass and keyboard 89
Estimating for the Electrical Trade 55
Ethics, Values and Professionalism 48
ETV and Broadcast Maintenance, Introductory 57

Fashion Illustration 60
Field Practice 48, 50
Film Assembly 73
Film Imposition and Printing Plate Surface Preparation (Advanced Stripping) 75
Film Imposition and Printing Plate Surface Preparation (Basic Stripping and Platemaking) 75

Film Imposition and Printing Surface Preparation (Colour Stripping and Platemaking) 75
Fire Hazards 40
Fire Prevention and Protection 40
Fitness, General 23
Flamenco Guitar — Group Instruction 91
Food Micro Biology 67
Food, Small Quantity 65, 66
Forkner Shorthand 44
Forms 36
French, Speaking Canadian 81
Fur and Leather Fashions 60
Fur Manufacturing Techniques 60
Furs, Theory and Recognition of 60
Furniture Finishing 60
Furniture Upholstery 60

Gas Appliances 19
Gas Fitter 21, 22
Gem-setting 63
Gemmology 63
General Accounting 44
General Fitness 23
General Machine Shop 53
Greek Language and Heritage 82
Group Process 47, 49, 50
Guitar Flamenco 91

Hairdressing Ladies' 61
Hairstyling, Men's 61
Harmony 89
Hearing Impaired (Total Communication) 52
Heating Equipment, Commercial and Industrial 22
Heating Technical Sales 21
History and Development of Jazz 90
Hot Metal Composition 72
Human Body 49
Human Growth and Behaviour 49, 50
Human Growth and Development 47
Human Relations 34
Human Resources Management 34
Hydro-Electric Power Commission Regulations 55

IBM/370 Assembler 37
Illustration 70
Improvisation, Techniques and 90
Indoor Gardening 24
Industrial Electronic Controls 56
Industrial Electronic Logic Static — Part IV 57
Infant and Child Development 49

Instrumental Group Instruction 89
Insurance 38, 39, 40, 41
Insurance Accounts and Finance 40
Insurance Administration and Essentials of Management 40
Insurance on the Person 38
Intermediate English Conversation and Writing 81
Interpreting for Medical and Legal Services 83
Introduction to Data Processing 36
Introduction to Photography 79
Introduction to Physical Distribution 36
Introduction to Records Management 36
Introduction to Typography 72
Introductory ETV and Broadcast Maintenance 57
Introductory Science Upgrading 10 6
Introductory Sociology 45
Italian Language and Heritage 81, 82

Jazz Dance, Modern 87
Jazz, History and Development of 90
Jewellery Advanced 63, 64
Jewellery Design 64
Jewellery Introduction 63
Jewellery Making 63, 64
Jig and Fixture Design A.T.E.C. 17
Junior Gourmet Cooking 66

Keyboard, Popular 92

Ladies' Hairdressing 61
Lathework 53
Law, Business 10
Law, Construction 7
Law, Procedural 35
Legal Office Practice 42
Liability 38
Life Drawing 70
Lighting Fundamentals 55
Logic 57
Loss Adjustment and Claim Settlement 39

Machine Printing 75, 76
Machine Shop, General 51
Machine Shorthand 44
Macrame 62
Manuals Management 36
Marketing 35
Marketing Management 35
Marketing Research and Information Systems 35
Mathematics 8
Mathematics I 7

Mathematics II 8
Mathematics I, Trade 9
Mathematics II, Trade 9
Mathematics Upgrading 6
Measurement and Layout 53
Meat Trade Theory, Retail Meat Cutting 67
Mechanical Maintenance 53
Mechanical Systems 13
Mechanics 8
Mechanics of Materials 8
Medical Office Practice 42
Medical Terminology 9
Men's Clothing 61
Men's Hairstyling 61
Metric System 10
Microfilm for Your Business 36
Microprocessors 58
Mixology (Cocktail Bartending) 67
Modelling 60
Modern Jazz Dance 87
Music Appreciation 90
Music, Electronic 90
Music Theory 89
Music Theory, Contemporary 90
Musical Comedy 86
Musicianship, Contemporary 90

Numerical Control 54

Office Practice 41, 42
Oil Burner 21, 22
Operator Training 62
Orchestral 91
Orchestration and Arranging 89
Orchestration of Contemporary Music 90

Paste Make-Up and Ruling 73
Pastry Craft 67
Personal Care 51
Photo-Technology, Basic 76
Photocomposition 72, 73
Photography, Introduction to 79
Photomechanical Colour Reproduction 74
Photomechanical Colour Separaton 74
Photomechanical Reproduction 74
Physical Distribution, Introduction to 36
Physical Distribution Analysis 36
Physics 7
Physics I 8
Pipe Design and Calculation 16
Pipe Hangers, Supports and Guides 17
Pipe Stress Analysis and Flexibility 17
Piping Standards and Codes 16
Pitman Shorthand 43
Playwriting, Practical 85
Plumbing Basic 13
Plumbing Design and Installation 13
Plumbing Qualification 13
Pneumatic Controls 20
Popular Keyboard 92
Practical Theatre 86
Practice and Method of Counselling 47, 48
Principles and Practice 38
Principles and Practice of Marine 41
Printing 73, 74
Procedural Law 35
Process Piping Drafting 16
Professional Workshops 90
Programming 37
Propane Gas 19
Property 38
Property Loss Adjustment 40
Psychology Introductory 10
Psychopathology, Childhood 48

Quantity Surveying 18

Rapid Reading 8
Real Estate 45
Records Management 36
Refrigeration 22
Reinforced Concrete Design 18
Retail Meat Cutting 67

Science Upgrading 10, Introductory 6
Screen Process Printing 77
Self-Development for Today's Woman 35
Serger Machine 61
Sewing Machine Operation 60, 61
Sewing Machine Repairs 62
Sheet Metal Design and Installation 14
Sheet Metal Theory 14
Shorthand 43, 44
Signwriting 77
Ski Conditioning 23
Social and Emotional Needs 51
Social Services, Problems and Issues 50
Sociology 50
Sociology, Introductory 47
Song-writing, Contemporary 90
Spanish Language and Heritage 82
Spanish for Travellers 82
Speaking Canadian French 81

Stage Management 86
Stationary Engineering 14
Still Life Drawing and Painting 70
Strictly for Entertainment 68
Structural Steel Design 18
Systems Analysis 37, 38

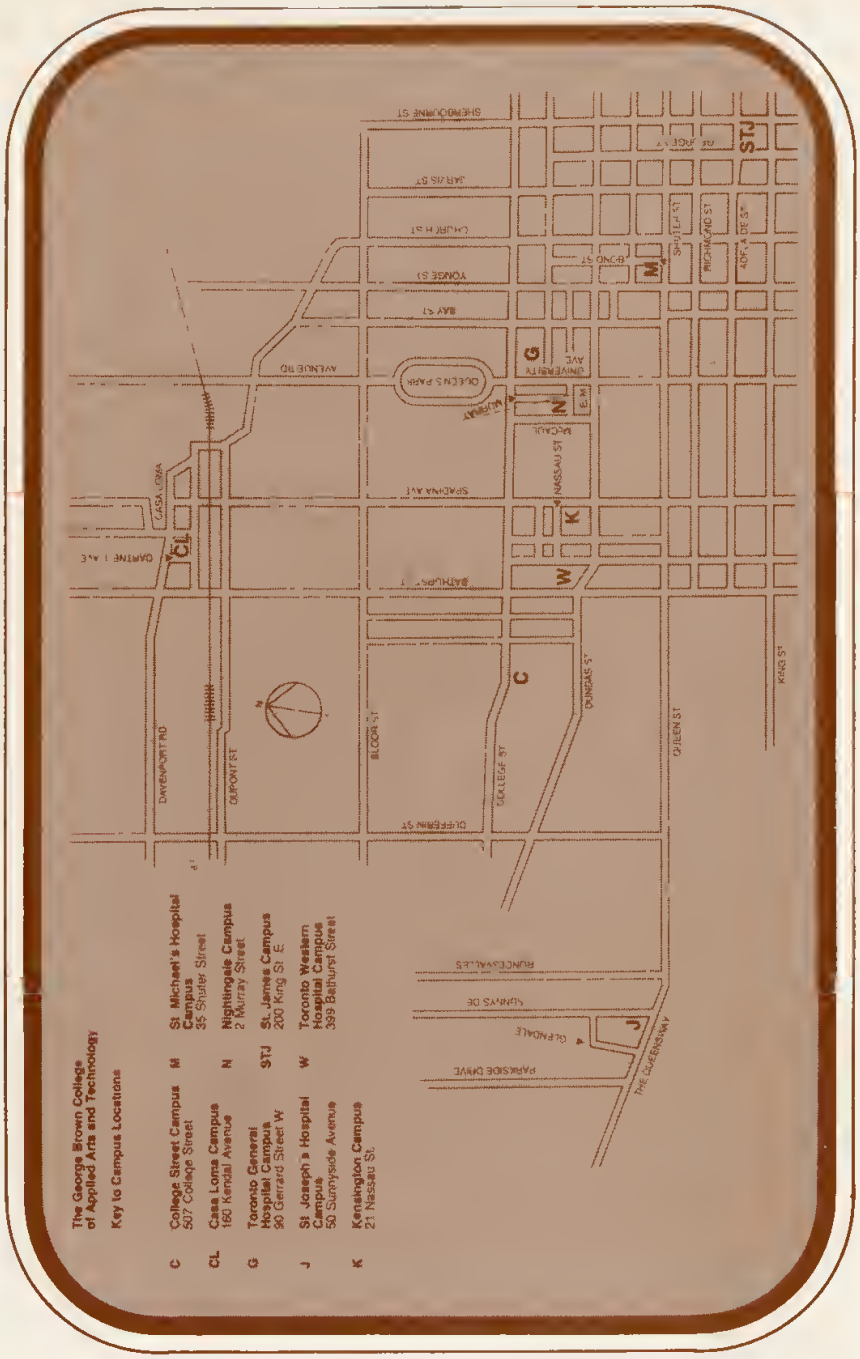
Tailoring 61
Teaching English as a Second Language to Adults 83
Techniques and Improvisation 90
Technical Drawing 15
Televison, Colour 56
Television Techniques 78
Tennis 23, 24
Theatre, Practical 86
Theory and Recognition of Furs 60
Total Communication (Hearing Impaired) 52
Trade Mathematics I 9
Trade Mathematics II 9
Treatment Philosophies 48
T.V. Graphics 70
Twentieth Century Cooking 66
Two-person Communication 9
Typewriting A (Beginning Typewriting) 42
Typewriting (Advanced Typewriting) 42
Typewriting, Basic — Lumisonic 43
Typography, Introduction to 72
Typing and Office Practice 41
Typing — Speed Development 43

Underwater Science, Applied 22
Upholstery 60

Video Tape Recorders 57

Warm Air Heating and Air Conditioning 21
Watchmaking 62
Weaving 61, 62
Welding 54
Welding Aluminum and Stainless Steel (G.T.A. and M.L.G.) 55
Welding Ornamental Metalwork 55
Welding Pre-certification (A.S.M.E.) 54
Wine Appreciation, Advanced 66
Wines, Spirits and Liqueurs, Appreciation of 66
Women in Business 35
Woodcarving 70
Work Management (Time Studies) 62
Working with Families 48

Yoga 23
Yoga Teacher Training Program 23



The George Brown College of Applied Arts and Technology

P.O. Box 1015, Station B, Toronto, Ontario M5T 2T9
Telephone: 967-1212